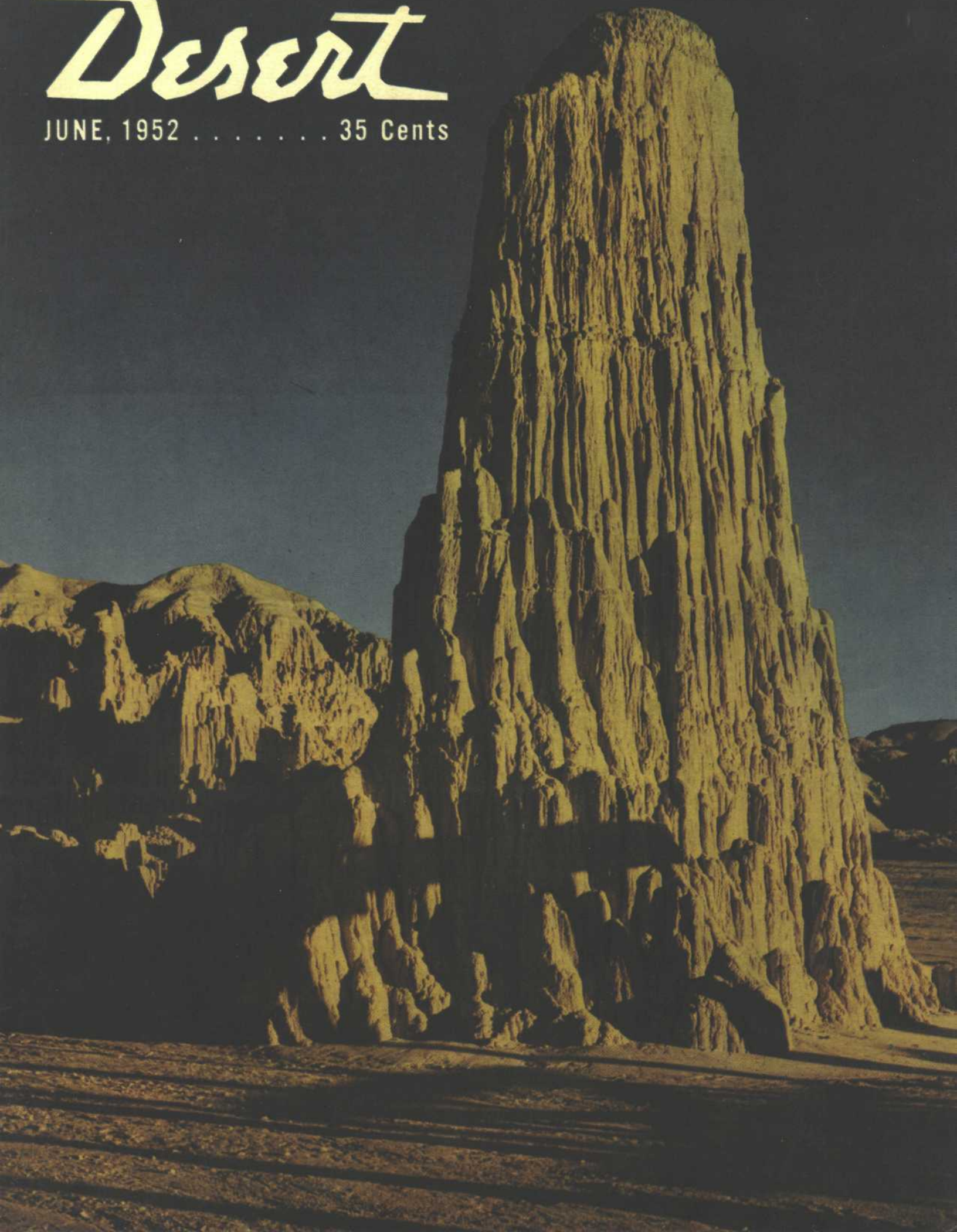
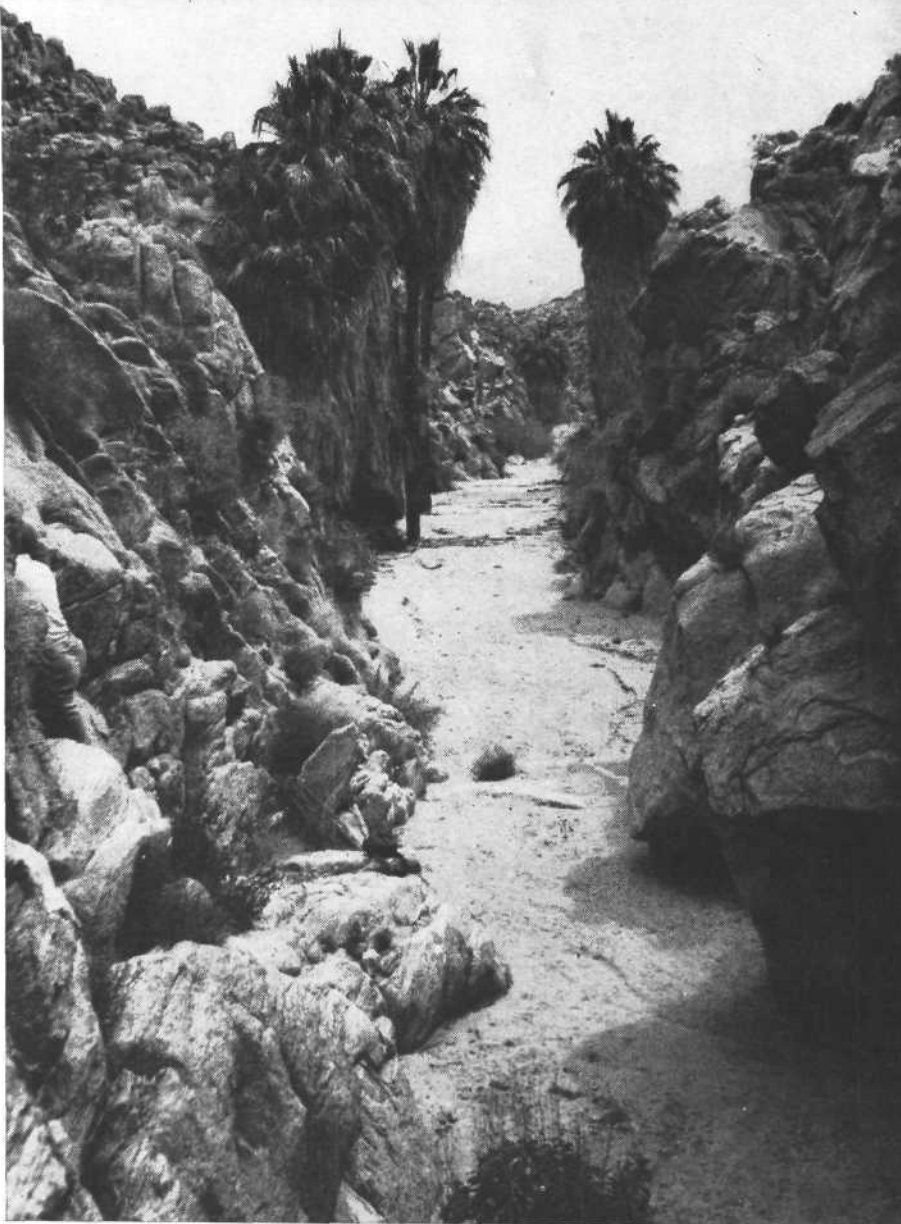


# *Desert*

JUNE, 1952 . . . . . 35 Cents





*Cat Canyon near California's Palm Desert.*

### **PAL**

By GLADYS L. SAVAGE  
Denver, Colorado

Patient little donkey,  
Plodding through the sand,  
Looking for tomorrow  
And the promised land.  
Land of golden nuggets  
Or twisted wire gold,  
Or maybe square cut emeralds,  
In a mountain's fold.

Keeper of the meal sack,  
The coffee pot and pan,  
The pick ax and the shovel  
And the dreams of man.

### **DESERT CANDLES**

By EMMA MESSICK  
Los Angeles, California

June is walking softly through the Yucca  
hills  
Lighting the desert candles after winter's  
dark.  
Tipping her torch of sunbeams over them  
she spills  
Down the straight stalk her light-igniting  
spark  
Until every little bell bursts creamy white,  
And all the desert hills are sprinkled with  
their light.

### **DESERT WINDS**

By E. A. BRININSTOOL  
Los Angeles, California

Oh, desert winds, you sing to me in accents  
mild and low!  
Of stretches green, where breezes soft go  
wandering to and fro!  
You sing of Springtime's balmy hours; of  
mesas blooming fair,  
Until I feel the desert lure that turns my  
footsteps there!

Oh, desert winds, I seem to hear you sing-  
ing as you go!  
While perfumes from the Southland fair in  
vagrant breezes blow!  
I catch the scent of greasewood on the cool-  
ing evening air,  
And I can tell the song you sing which bids  
me come back there!

Oh, desert winds, my heart goes out to your  
enticing plea!  
I hear your murmured accents drift across  
the sagebrush sea!  
Your beauties rise before me from across  
the shifting sand,  
And bind the tie that draws me back to my  
own Desert Land!

## ***On Entering Cat Canyon***

By WALTER EUGENE VINSON  
La Mesa, California

I enter now the red hawk's ancient realm.  
Forgive this new intrusion, regal one,  
From whose wide wings beneath the very  
sun  
Suspends afar the Universe's helm;  
Whose fierce frontiers admit no soft-leaved  
elm  
Or dallying aspen, but to warp and stun  
Weave hot horizons where the lizards run  
And majestic palms lift toward the sun.  
Your boundless battlements of raging rock  
Once knew the Indian warrior's wary tread,  
Beneath your eye the arrow and flintlock  
Were bloody rivals, but their masters dead,  
You soar once more and looking down-  
ward mock  
My usurpation where Time reigns instead.

### **DESERT CITY**

By GRACE BARKER WILSON  
Kirtland, New Mexico

A phantom city's lying on the desert's magic  
face,  
A city with its walls all gleaming bright;  
And from afar I watch as rosy sunset gilds  
the place,  
And long blue shadows creep through there  
at night.

I view it from my hill top, but in fancy I  
am there  
Among the shades that wander up and  
down;  
No matter how I strive the secrets of their  
lives to share,  
I cannot break the silence of that town.

For when I come too near it all the vision  
melts away.  
The walls and towers vanish from my sight.  
There's nothing left of magic, just the bar-  
ren hills all gray,  
That melt together in the dusky light.

### **DESERT LANDSCAPE**

By E. E. MITCHELL  
Winslow, Arizona

Blue and purple shadows play  
Across the desert land,  
While distance lends enchantment  
To a stretching sea of sand.  
Rainbow colors glow and change  
As if a Mighty Hand  
Had scattered precious jewels there  
To mingle with the sand.  
Beyond the gleaming desert rim  
The purple mountains rise—  
Majestic in their grandeur still  
Against the evening skies.  
The desert dusk falls quickly on  
The sunset's golden flare,  
While tall Saguaro cacti  
Lift their arms in silent prayer.

## ***Fear***

By TANYA SOUTH

To face the open Door at last,  
And look unfrightened at the vast  
Far panorama, is to be  
Wholly and truly free.

Fear holds us back. It shuts the door.  
It wraps the conquests life can store  
In such black mantles of despair,  
The thoughts become a perfect snare  
For failure of each separate plan  
Made by a man.



## DESERT CALENDAR

- May 30-June 1—Sierra Club, Southern California Chapter, desert peaks section hike. San Francisco Peaks, near Flagstaff, Arizona.
- May 30-June 1—Sierra Club, Southern California Chapter, hike to San Jacinto primitive area, California.
- June 1—Lincoln County Homecoming Day, Caliente, Nevada.
- June 1-30 — Special exhibit, California Indian Arts and Crafts, Southwest Museum, Highland Park, Los Angeles, California.
- June 11-14 — Rodeo and Pioneer Days, Clovis, New Mexico.
- June 12—Second Annual Day of Nations Festival, Encanto Park, Phoenix, Arizona.
- June 13—Corn Dance, San Antonio Day, Taos Pueblo, New Mexico.
- June 13-14 — Arizona Cattlegrowers Association quarterly meeting. Flagstaff, Arizona.
- June 15—Dedication of Mary Beal Nature Trail at Mitchell's Caverns, 23 miles northwest of Essex, California. A plaque and cairn, honoring the desert botanist of Daggett, California, will be unveiled by Jack Mitchell at 10 a.m.
- June 18 — Annual Strawberry Day, Pleasant Grove, Utah.
- June 20-22—New Mexico State Future Farmers of America Rodeo. Youngsters only. Santa Rosa, New Mexico.
- June 23-July 4 — Southwest Writers Workshop, Arizona State Teachers College, Flagstaff, Arizona.
- June 24 — San Juan Day at Taos Pueblo, New Mexico. Corn Dance.
- June 25-28 — Annual Rodeo, Lehi, Utah.
- June 26-28 — Vernal Rodeo, Vernal, Utah.
- 
- ## GEM AND MINERAL EVENTS
- June 14-15—East Bay Mineral Society annual show, Oakland, California.
- June 20-22—California Federation of Mineralogical Societies convention, Angels Camp, California.
- June 26-29 — American and Rocky Mountain Federations of Mineralogical Societies convention, Canon City, Colorado.



Volume 15

JUNE, 1952

Number 6

<b>COVER</b>	Golden Turret in Cathedral Gorge, Nevada By Josef Muench of Santa Barbara, California	
<b>POETRY</b>	On Entering Cat Canyon, and other poems . . .	2
<b>CALENDAR</b>	June events on the desert . . . . .	3
<b>CINEMA</b>	On Location With the Navajos By BETTY WOODS . . . . .	4
<b>NATURE</b>	Methuselah of the Junipers By ROBERT CROMPTON . . . . .	9
<b>FIELD TRIP</b>	Petrified Wood Along the New Butterfield Trail By HAROLD WEIGHT . . . . .	10
<b>PERSONALITY</b>	Writer of the Chiricahuas By DOR WOODS . . . . .	16
<b>MINING</b>	Current news of desert mines . . . . .	18
<b>EXPLORATION</b>	Murray Canyon is a Challenge By RANDALL HENDERSON . . . . .	19
<b>PHOTOGRAPHY</b>	Pictures of the Month . . . . .	23
<b>CLOSE-UPS</b>	About those who write for Desert . . . . .	24
<b>FICTION</b>	Hard Rock Shorty of Death Valley . . . . .	24
<b>EXPERIENCE</b>	Life on the Desert By JOSEPH SCHMEDDING . . . . .	25
<b>LETTERS</b>	Comment from Desert's readers . . . . .	27
<b>NEWS</b>	From here and there on the desert . . . . .	29
<b>DESERT QUIZ</b>	A test of your desert knowledge . . . . .	32
<b>LAPIDARY</b>	Amateur Gem Cutter, by LELANDE QUICK . . .	36
<b>HOBBY</b>	Gems and Minerals . . . . .	37
<b>COMMENT</b>	Just Between You and Me, by the Editor . . .	42
<b>BOOKS</b>	Reviews of current Southwestern literature . .	43

The Desert Magazine is published monthly by the Desert Press, Inc., Palm Desert, California. Re-entered as second class matter July 17, 1948, at the post office at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1952 by the Desert Press, Inc. Permission to reproduce contents must be secured from the editor in writing.

RANDALL HENDERSON, Editor  
BESS STACY, Business Manager

MARGARET GERKE, Associate Editor  
MARTIN MORAN, Circulation Manager

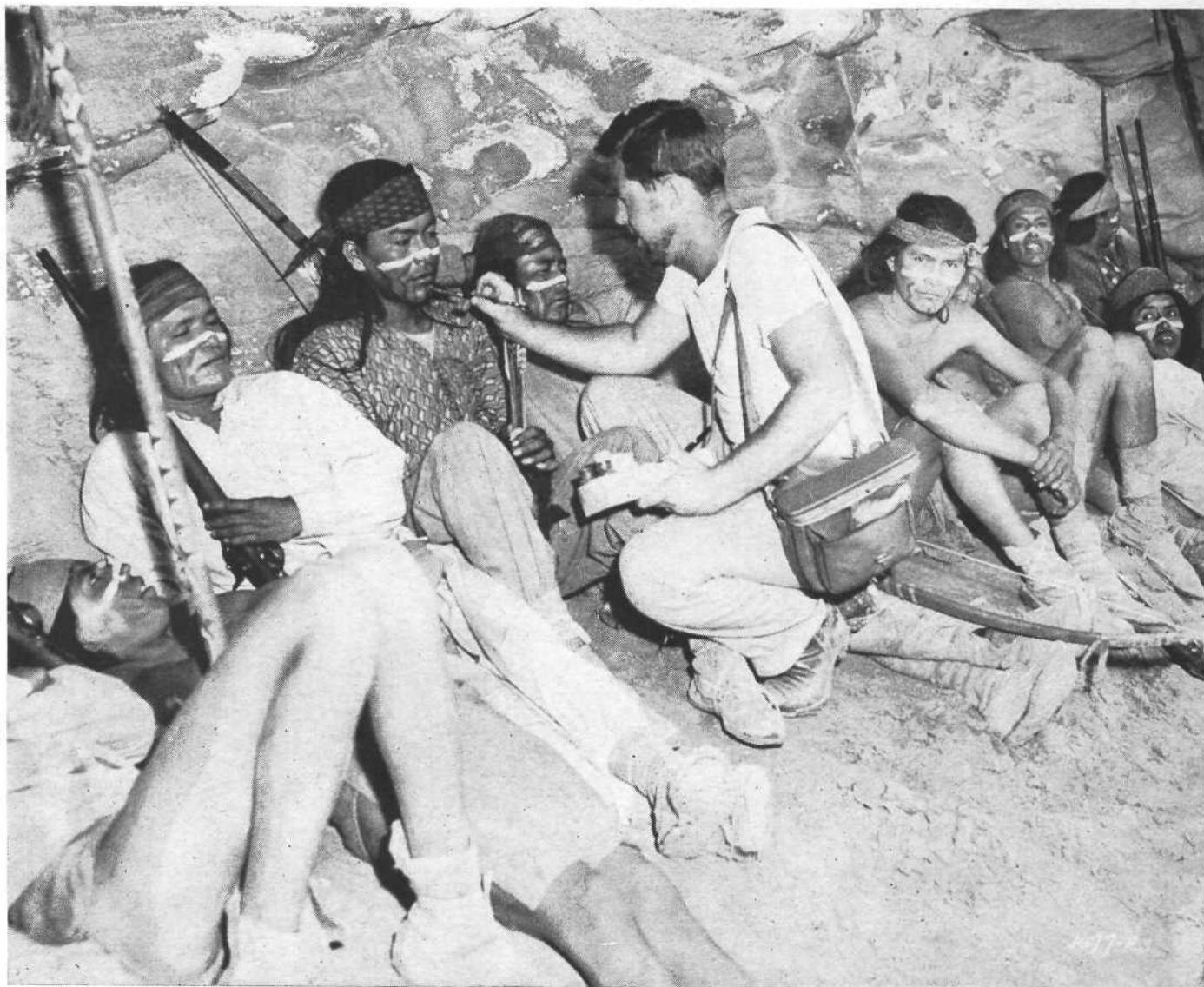
Unsolicited manuscripts and photographs submitted cannot be returned or acknowledged unless full return postage is enclosed. Desert Magazine assumes no responsibility for damage or loss of manuscripts or photographs although due care will be exercised. Subscribers should send notice of change of address by the first of the month preceding issue.

### SUBSCRIPTION RATES

One Year.....\$3.50      Two Years.....\$6.00  
Canadian Subscriptions 25c Extra, Foreign 50c Extra

Subscriptions to Army Personnel Outside U. S. A. Must Be Mailed in Conformity With P. O. D. Order No. 19687

Address Correspondence to Desert Magazine, Palm Desert, California



Monte Westmore, make-up expert, puts Apache war paint on the Navajo players.

## On Location With the Navajos

When a Hollywood picture company wanted wild Indians to play the roles of Apache Warriors in the filming of "The Battle at Apache Pass" at Moab, Utah, they recruited Navajos from Monument Valley. And here is the story of how these tribesmen reacted to the strange situation—playing Apache under a Mohawk Indian Geronimo and a white Cochise in the artificial atmosphere of a Hollywood set.

By BETTY WOODS  
Photos by Universal Pictures Co.

**W**HEN WORD came to get out of sight, I hurried with a hundred others to hide quietly in the brush. Suddenly from the rimrock above, wild Apache yells and the swish of arrows filled the furnace-hot air. Several cavalymen fell sprawling in the sandy arroyo a few yards away, some with arrows in their backs.

Here were our Indian friends, who a short time ago had been talking and

laughing with us, now turned into screaming savages. In a minute it was all over.

"Good work, boys," George Sherman, the mild-mannered director, called to the Indians. "Come on down."

That was the way it was during the shooting of *The Battle at Apache Pass* in Moab, Utah. There was never a retake when the Navajos did a scene.

Maybe it was because they were having so much fun playing Apaches.

My husband, Clee Woods whom I call Poncho, was technical adviser on the desert for Universal-International's technicolor story of Cochise. This Colorado River country was giving us fresh experiences. There were new Indians to know—Navajos from the remotest part of Monument Valley. Most of them wore their hair long and couldn't speak English.

The sweat-streaked Indians leaped down from the blood-red cliffs and rushed for ice water, soda pop and shade. The thermometer in the sound truck read 112.

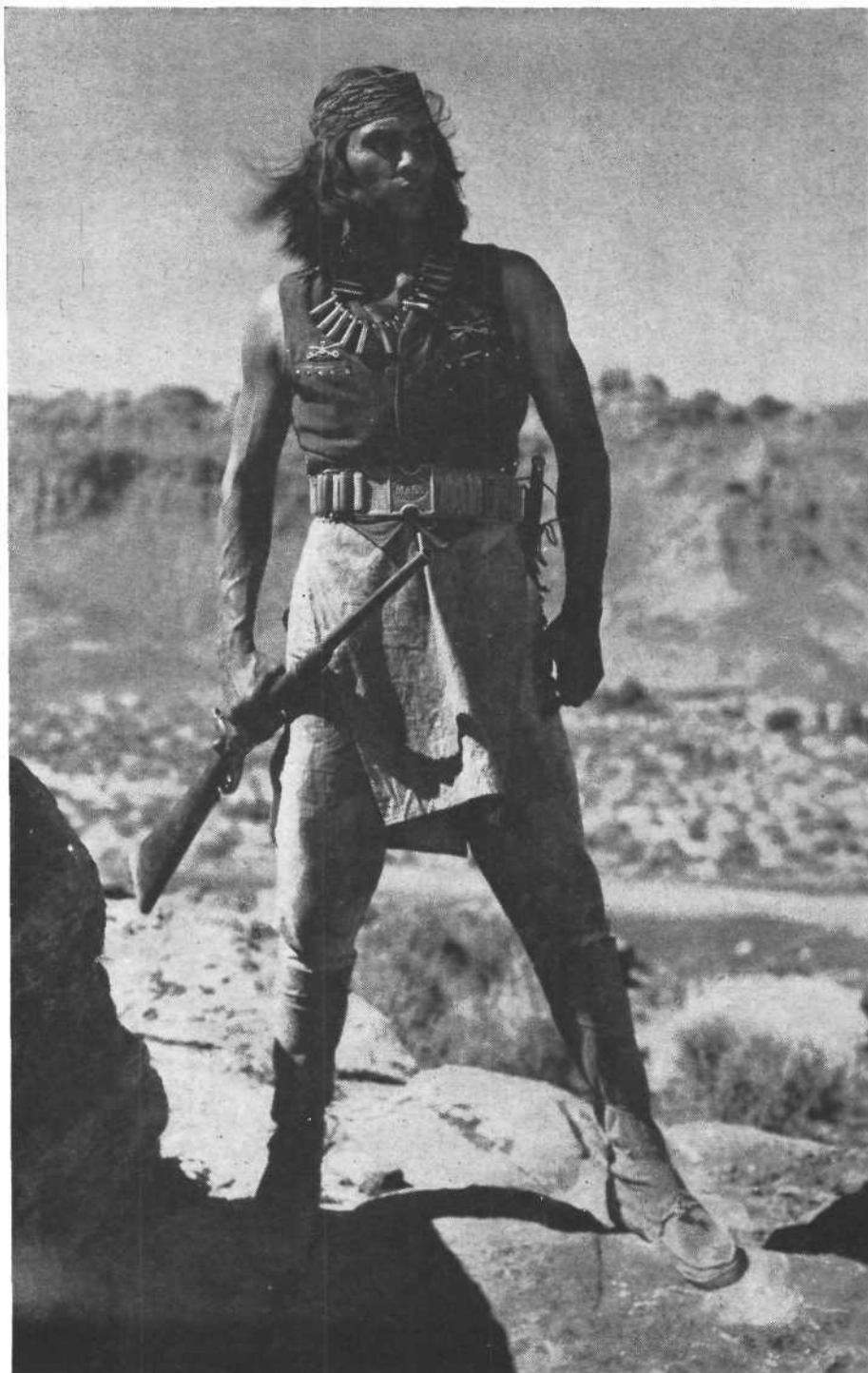
"Hey, Gomez," called Tony to the make-up man, "our war-paint is running." Tony had gone to school, learned English and cut his hair. He





*Above—Clee Woods had to teach this Apache Devil Dance to Navajo actors for "The Battle at Apache Pass." The Indians liked it so well, they decided to ask the Navajo Tribal Council to adopt a modified version as a native dance.*

*Below—U. S. Cavalrymen and Indian leaders hold an ill-fated peace conference. Scene was staged in Courthouse Canyon near Moab.*



*Actor Jay Silverheels, a Mohawk Indian, played the role of Geronimo.*

was one of the few Navajos who had to wear an Apache wig. He snatched off the hot headgear and held it up, yelling, "I'm scalped!"

To the Indians this job of being movie extras was one long fiesta. In front of the camera they rode horseback, chased the U. S. cavalry with guns and bows and arrows, and warded. Between scenes they dozed under cliffs, kidded and commented about tourists in Navajo. They watched with unashamed curiosity while make-up men sprayed mahogany paint on white actors. They laughed when spots

were painted on the mare that doubled for Geronimo's horse.

At night they sang and danced around the fire in their temporary camp at the rodeo grounds, played cards and visited. On cool evenings Poncho and I would drive out to watch and talk to them.

But one night when we arrived at camp we didn't hear a single drum beat. Poncho stopped the car and two Navajo boys came up. "We want to dance, but we got no drum." The one they had been using was in the property truck.

"Maybe we can fix you up," Poncho told them. Back to town we went to find the property man and his key. But we were out of luck—no property man. Then Poncho had an idea. We drove to a garage and picked up a gallon oil can and a discarded inner tube.

Back at camp the Indians soon had a drum. Every night as long as the Navajos were there they used it. We recognized many of the native songs, but some of the old, old ones we had never heard before. Familiar chants occasionally startled us. Snatches of cowboy songs had a reckless way of straying into them.

Yet it wasn't all fun for these Indians. Out in the dry scorching sun they would sit patiently on their horses to wait for the next scene. They were good troupers. They never complained.

These Navajos were natural born actors. In fact, George Sherman said they were stealing the show. Their quick understanding of a situation brought admiration from all the white actors. An example of this was shown when Poncho had to teach them the Apache Devil dance. None of the Indians had ever seen this weird dance. Poncho told them what it was like. Questions and long discussions in Navajo followed. Finally the Indians said they had a similar dance of their own. So, they combined it and the Apache dance to make an entirely new one. The Navajos liked the result so well they are asking the Tribal Council to adopt it as one of their own native dances.

In spite of their limited understanding of English, the Indians needed less rehearsing than some of the white players. Lee Bradley, the Navajo trader from Monument Valley, was interpreter for the 90 Indians. His quiet, friendly wife—part Navajo, part Apache—came with him.

Mrs. Bradley and I spent much of our time trying to keep out of the camera's way, and stay in the shade. "Now," she'd say when we'd find a cool spot, "I'll bet we have to move." She was right. We always did. It got to be a kind of game between us and the camera. Mrs. Bradley insisted that the camera could look over rocks and peer around corners.

It was Poncho's job to co-ordinate history and Hollywood showmanship. He was to keep Apache customs and cavalry commands authentic. It was director George Sherman's job to make the picture entertaining and pictorially beautiful. Occasionally fact had to be ignored, but this did not happen often.

It was the cavalry guidon that really got Poncho down. The tent set was dressed and waiting for the next scene.



Poncho had put the guidon in its proper place in front of the tent, at the left side of the door. This is one scene that will be authentic, he thought. Poor Poncho!

"O.K.," said George coming onto the set. "Let's get rolling. We'll shoot this scene from the back of the tent."

Poncho sat down on a rock and shook his head.

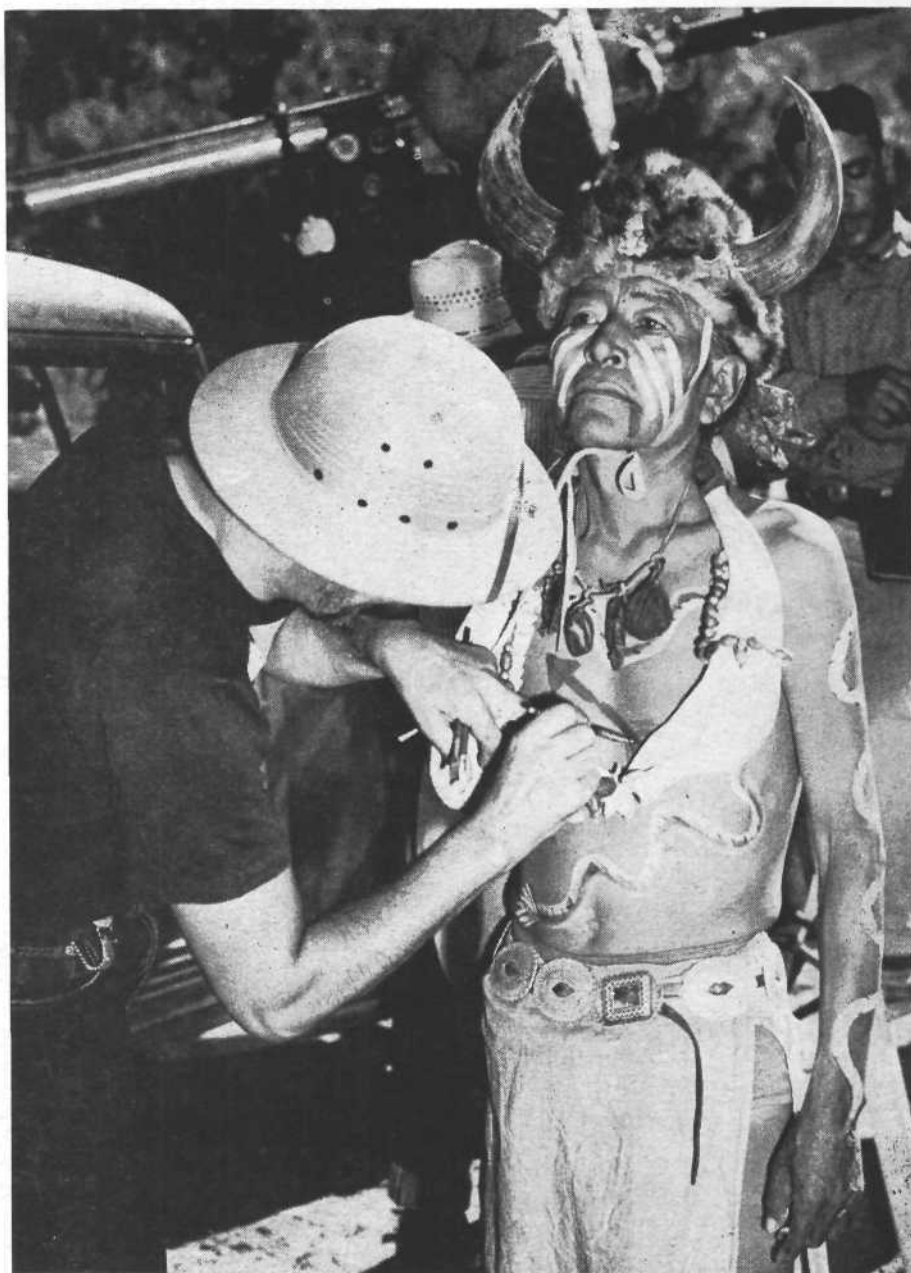
There is a strange superstition about clouds and George Sherman. Out here on the desert it was completely mystifying. For a month the sky had been bright blue and cloudless. Now, near the end of shooting time, clouds were needed for pictorial effect. When I heard someone comment, "We'll have clouds tomorrow," I thought he was joking.

"When George needs clouds, he gets them," another worker agreed. In fact, everybody agreed. Maybe Sherman got clouds other places, I thought to myself, but this was the Utah desert and the wrong season for dramatic cloud formations.

By seven the next morning the long caravan of buses, trucks and cars was winding up the canyon road beside the Colorado River. The high blood-red walls seemed to glow with heat. Twenty-six miles later we arrived at Preacher Flats where a fort set had been built. Everyone began taking salt pills early to combat heat sickness. Make-up men sprayed cavalymen's faces and uniforms to make them look desert-weary. Actually we were all covered with red dust from the trip from town.

Little whirlwinds chased one another across the parade grounds. The silk flag—especially made with 34 stars—flapped in the wind. Caissons, ambulance wagons and other army equipment rattled into camera focus. Then all work stopped. George in his tall director's chair mounted under an umbrella was waiting for clouds. The sky was clear blue and very hot. For a long time a hundred people just sat, waiting.

While we watched for clouds, a tall lean-boned old man came to sit beside me. His squinted eyes and wind-toughened skin told me he had seen a lot of living out here on the desert. After he had asked me many questions, most of which I couldn't answer, I began asking him a few of my own. As a child he had come with a party of Mormon immigrants, he said. "We camped here with our wagons on this very spot and named it Preacher Flats. You know, I've seen a lot of things in my time, but this movie business is sure something. Why, a man could shoe a horse over there in the blacksmith shop, it's that complete."



*Vincent Romaine is making up Yazzi Clyah, a Navajo medicine man, for a role in the Apache play.*

After a while somebody said, "There's the first one." Behind a big red mesa a little stray cloud wandered alone in the bright blue. "Little ones make big ones," said the mike man.

The lunch wagon arrived with its white-coated waiters. They unfolded tables and canopied tops. Clouds piled up higher and whiter. The wind grew stronger. It covered food—everything with sand.

After lunch the battle scenes were shot against massive wind-blown clouds. Soon these turned to ominous black ones. And the sand-carrying wind grew stronger. Then rain. All turned into the fury of a desert storm. The cast kept right on working. For mood, all the equipment in Hollywood couldn't have produced a better effect.

Only this was real. The legend of George Sherman and his clouds held.

Some evenings when we didn't visit the Navajos we would drive to Courthouse canyon and talk to the night watchman in charge of equipment. Sitting on the steps of the wardrobe truck, we'd listen to this oldtimer's stories of Utah pioneers—stories of hardships, homesickness and heroism. His uncle had come west ahead of Brigham Young's colonizers "to build the bridges and kill the snakes so the others could come on."

Sand and heat were the annoying discomforts now, just as they had been when the Mormons first came to the valley. Make-up ran. Mustaches slipped. But nobody complained. Too



*Cochise (Jeff Chandler), fourth from left, sits with his Apache tribal council. His wife Nona (Susan Cabot) is with the native women in background.*

many funny things were happening. Like the cavalryman who lost his suspenders. All work stopped while he took a pair from a trooper not in the scene. The friend had to hold up his own trousers while his suspenders were in use. Production was held up when the bugler disappeared. He had somehow locked himself in one of the sets. People made so much noise yelling for him that they couldn't hear him pounding on the door. The Navajos sat back and thought it all very funny.

The most startling things were always coming over the loud-speaker. "Somebody bring the blood for the bandages." "Are the cannons ready to shoot the peat moss?" "Where are those guys we're going to throw over the cliff?"

The actors liked the desert. This wasn't a pose. The spectacular scenery and color impressed these people who are so used to spectacles. Regis

Toomey never came to work without his color camera. Between scenes he'd be taking pictures of fantastic rock formations or Navajos. Other members of the cast planned for fall hunting trips into the mountains. Some of the men traded with the Navajos who somehow had extra belts and jewelry on hand. Anybody could see the actors liked the Navajos.

The Indians liked most of the Hollywood people. But the actor who interested them more than any other was Jay Silverheels, a Mohawk Indian. Silverheels plays Geronimo in *The Battle at Apache Pass*. People in Moab admired him tremendously. Wherever he went he was surrounded by children. His sincere fondness for them reached out to boys and girls alike.

When the company arrived in this picturesque desert town there was courteous interest in the newcomers.

But motion picture companies weren't new to Moab. Two other shows have been filmed in the nearby technicolor country. More will come, because the Moab people are fair to deal with. Some of them worked as extras. Most of the cavalrymen in the picture were cowboys from nearby ranches.

Moab liked the Hollywood people. To prove its friendliness, the town gave a Fourth of July picnic for the entire company of 120. The realistic people of the desert met those of make-believe and found respect for each other.

But there was one incident I'll remember a long time. On our last day on location an old Navajo touched Poncho shyly on the arm. Slowly he said, "Everybody." This was the only English word he could speak. He had learned the one word he had heard most often here. He was proud he could speak just this one, "Everybody." And so were we for him.



# Methuselah of the Junipers

By ROBERT CROMPTON

**O**LD JUNIPER is perched on a throne of stone high on Cottonwood ridge up Logan canyon, just a few miles east of Logan, Utah. The tree is believed to be 3000 years old.

Botanists look on the long life of Old Juniper with as much amazement as Methuselah's 969 years, because the average age of a red juniper (coniferous tree of the genus *Juniperus*) is 500 years with very few ever reaching 1000 years.

Proving, perhaps, that frugal living is the way to a long life, Old Juniper is believed to have sprouted 3000 to 3500 years ago in the crevice of a monolith. The boulder, it would seem, could provide no more water and food for the young seedling than a sand dune could for a stalk of corn.

At an altitude of 7300 feet—on a shoulder of the Wasatch mountains—the juniper must have had a struggle the first couple centuries.

After two hundred years, botanists guess, the tree was a mere sapling six to eight inches thick. It sunk its roots through the dirt in the crevice down to the solid limestone—a dead end. But the roots gave off carbon dioxide which dissolved the stone a little each year, and they felt their way deeper into the rock.

Other elements of nature helped. During winter, water would flow into the crevice, freeze and spread it open wider.

After three centuries it had a substantial toe hold. Too, it had built a network of roots that would supply it with sufficient food and water. It grew slowly, adding an inch to its circumference each century.

A few hundred years more and it had become the monarch of the Wasatches. While other junipers growing at the same time in more fertile ground were dying Old Juniper was still in its youth. Perhaps the hardy root system it had developed in wedging its way through that great mass of rock made the difference between a long life and just an ordinary life.

The ancient tree is 26 feet eight inches around its rotund base, and is 44 feet six inches tall. There's enough wood in it to keep a cabin warm for at least two winters.

When the juniper, after four or five centuries, was the established "old man" of the mountains it probably reached its maximum growth. Adding

height and width like a young man in his teens, Old Juniper likely put an inch on its girth each 65 or 70 years.

For centuries it grew steadily, without interruption, and then in the 1870's tragedy struck. Some botanists are of the opinion lightning struck the tree, while others believe a forest fire ravaged its mountainside.

Now it's starting to show its age. With a hollow trunk and only a few branches that still bear the green of life, it looks like an ancient pioneer of the desert in the autumn of life.

A masterpiece of Nature's finest work in sculpture, its trunk and limbs twist and bulge into muscular beauty.

The tree was discovered in 1923 by Maurice Linford, then a student at Utah State Agricultural college in Logan. He brought it to the attention of the college botany department. The tree was entered in the National Roster of famous trees, and was officially named Jardine Juniper for William Jardine, a graduate of Utah State Agricultural college, who became U. S. Secretary of Agriculture.

The old man of the mountains has quadrupled the ordinary life-span of red junipers but is now nearing the end of its existence. Botanists predict it can live but a few more hundreds of years.

*This old juniper in the Wasatch mountains of Utah is believed to be 3000 years old.*





*This is the desert area made accessible by the new Imperial Highway. Old Indian campsites in this region have yielded many artifacts to museum collectors. Cloud-shadowed Coyote Mountains are in the distance.*

# Petrified Wood Along the New Butterfield Trail

In the 1850s the best — and about the only — road from Yuma across the Colorado desert to the Pacific coast was the Butterfield stage route that followed Carriso and Vallecito creeks and climbed to the hot springs at Warner's ranch. Then this old road fell into discard, and for nearly a century much of it has been impassable to conventional cars. In recent months, however, San Diego County has built a new graded highway paralleling the worst portions of the old road—and today the motorist may roll along in high gear through a sector of the Southern California desert which has been closed to all but the hardiest travelers. Today it is known as the Imperial Highway—and its sponsors believe that before many years it will be a new paved short-cut from Los Angeles to Imperial Valley.

By HAROLD O. WEIGHT

Photographs by the author

Map by Norton Allen

**7** DOUBT IF Marshal South, the poet of Ghost Mountain, would have approved recent developments along California's historic Butterfield Trail. Marshal's little adobe cabin on the top of the monument looked down on the old trail where it wanders through the desert of southeastern San Diego county. Often he followed the almost forgotten ruts of the old stage road to Vallecito and Agua Caliente and beyond.

He felt the romance of that first transcontinental stage line, for he put it into words in a poem written for *Desert Magazine*. I never go into that history-haunted land without recalling some of Marshal's lines.

*There's a valley I know in the waste-lands*

*Where, down through the grease-wood and sage  
Like a dim ghostly thread from the years that have fled  
Stretch the tracks of the Overland Stage.  
Lone, ghostly and dim in the starlight  
Grey, desolate and pale in the dawn,  
Blurred by heat-waves at noon—still  
O'er mesa and dune  
Wind the tracks of wheels that have gone.*

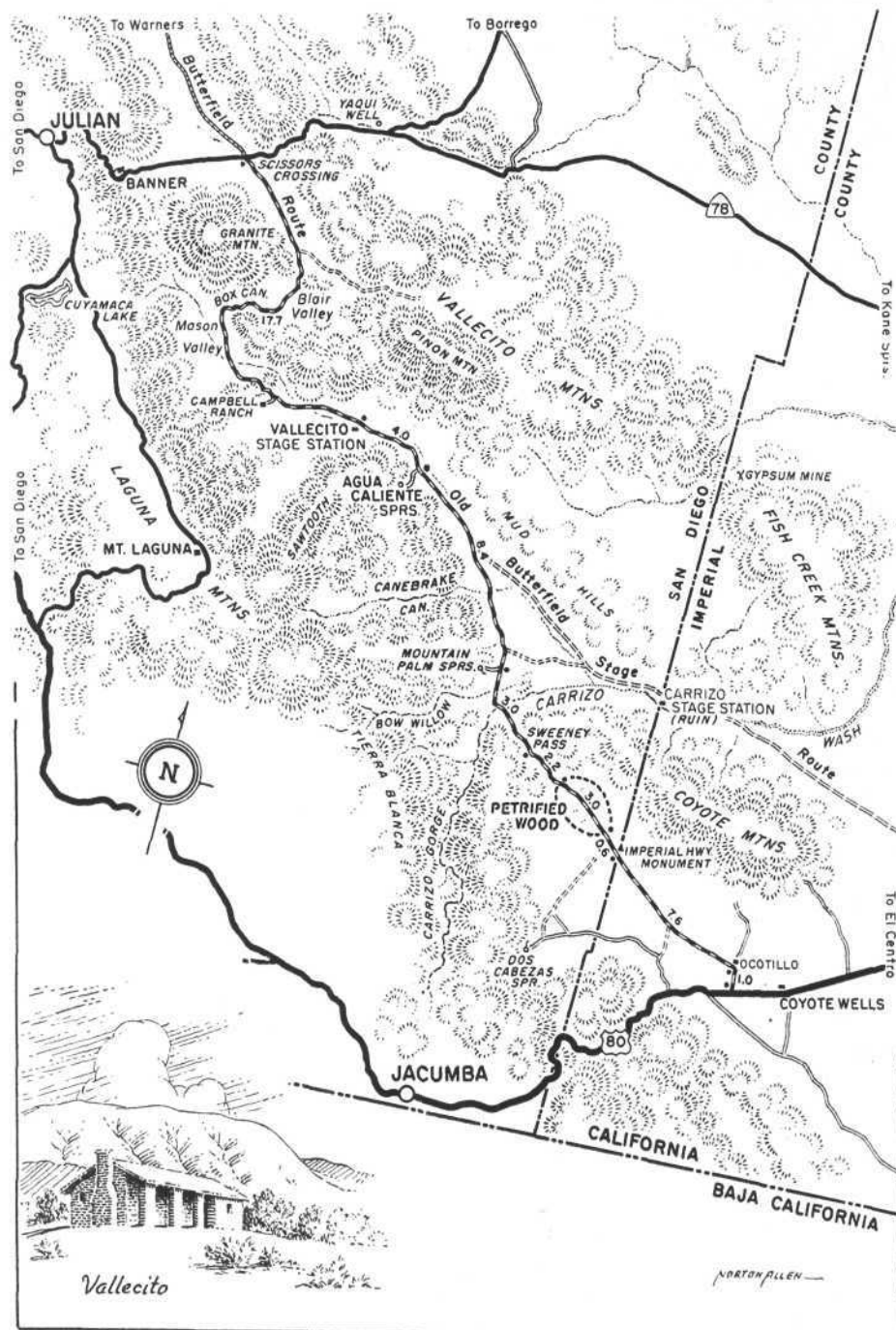
He described, in that poem, how on starlit nights at the old stage station of Vallecito you could see—or at least imagine you saw—the stages once more sweeping by. And I know the feeling he was conveying. To me that series of little valleys through which the ancient trail climbs from the great desert to the mountains is a





*Above—At a cost of \$40,000 San Diego County has constructed 5½ miles of new road paralleling the most impassable portion of the old Butterfield Trail. Picture taken at the San Diego-Imperial County line.*

*Below—Petrified wood is found as float on the rolling hills south of Sweeney Pass. Graining and knotholes are frequently weathered to striking relief, making the specimens ornamental in dish and table arrangements.*



of what the type known as the "tin can tourist" may do to Vallecito and Agua Caliente and Mountain Palm Springs.

But that must work out as it will, for the road is open. We received word of its completion last December in a jubilant letter from George Kellogg, perennial secretary of the Imperial Highway Association. "The section between the Kane Springs-Julian road and Ocotillo, near Coyote Wells on Highway 80, has been completely improved with a good graveled road, well aligned and 20 feet wide," he wrote. "We traveled it at from 40 to 50 miles per hour. Since then we've been recommending: 'Take the Imperial Highway! See some new country in Southern California!'"

George's enthusiasm is understandable. Since the highway first was projected in 1929, he has been one of the prime movers in the struggle to put through a first class roadway from El Segundo on the coast to El Centro. He was there in 1931 when the association backed the present route by adopting a report which declared: "Whereas in 1858 the Butterfield Trail was the shortest and most feasible route from the Imperial Valley to the Pacific, that distance has not varied with time and so today a modern highway following approximately the route of the Butterfield Stage would likewise be the shortest and most feasible route for the Imperial Highway Association to promote and improve."

Since then millions have been spent improving, aligning and connecting sections of the highway-to-be from Los Angeles out. But in all those years, the map name of "Imperial Highway" on a wriggling black line in southwestern Imperial and southeastern San Diego counties seemed little better than a practical joke to any who tried to follow it.

Lucile and I had personal experience with the condition of that "highway" early in 1949, when we attempted to drive all the way through along it, from State Highway 78 to U. S. 80. We found the road from the north greatly improved to a point below Agua Caliente. But at Agua Caliente, Robert Crawford, custodian for the hot springs there and for the restored stage station of Vallecito, both San Diego County parks, warned us that Sweeney Canyon was not what he could call passable, going south, and that it was easy to slip over the edge there if you tried it. A carryall had barely made it a few days before coming north—and that was down hill.

Well, we went on, but our jeep truck was in four-wheel drive by the time we reached Carrizo Wash. From

land apart—a place where legends are believable and where phantoms might come at night.

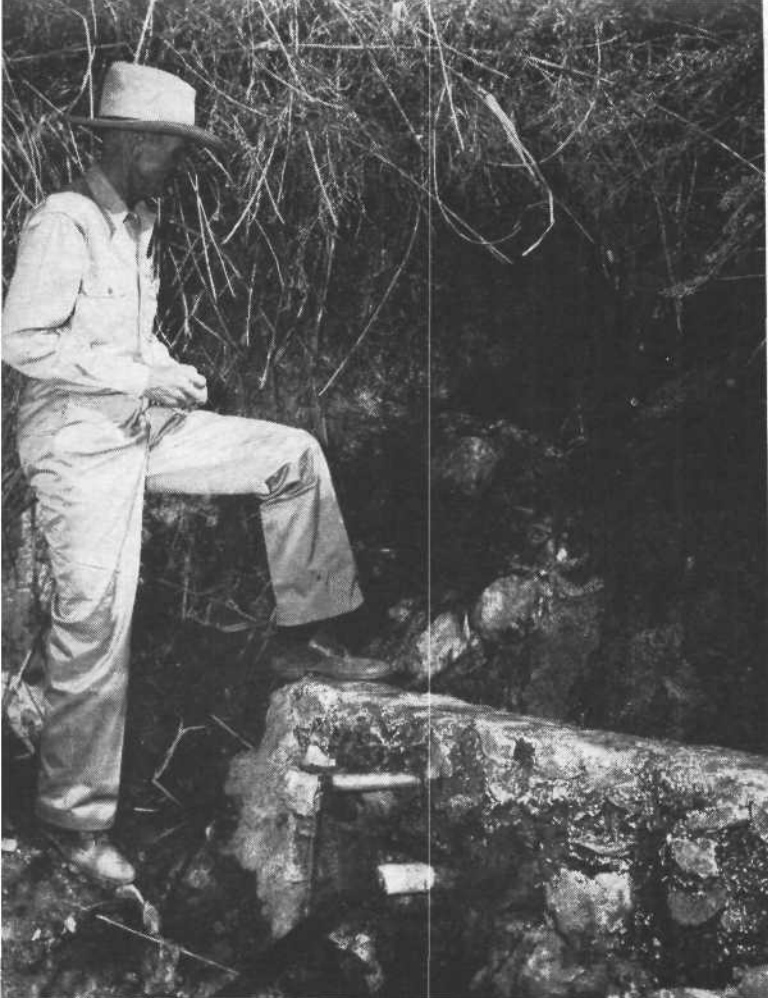
Part of the charm of this land which has seen so much of the passing pageant of our Western history, lay in its aloofness, its sense of continuity with the past. When you went below the Devil's Canyon and Vallecito and Agua Caliente, the road constantly deteriorated and became ruts which in turn became sand washes and no one came that far unless he belonged to the country, or really desired to see it.

Well, all that is changed now. The old trail won't be lonely any longer, and if phantom stages are prowling on starlit nights, they'd better watch out for modern automobile traffic. Because

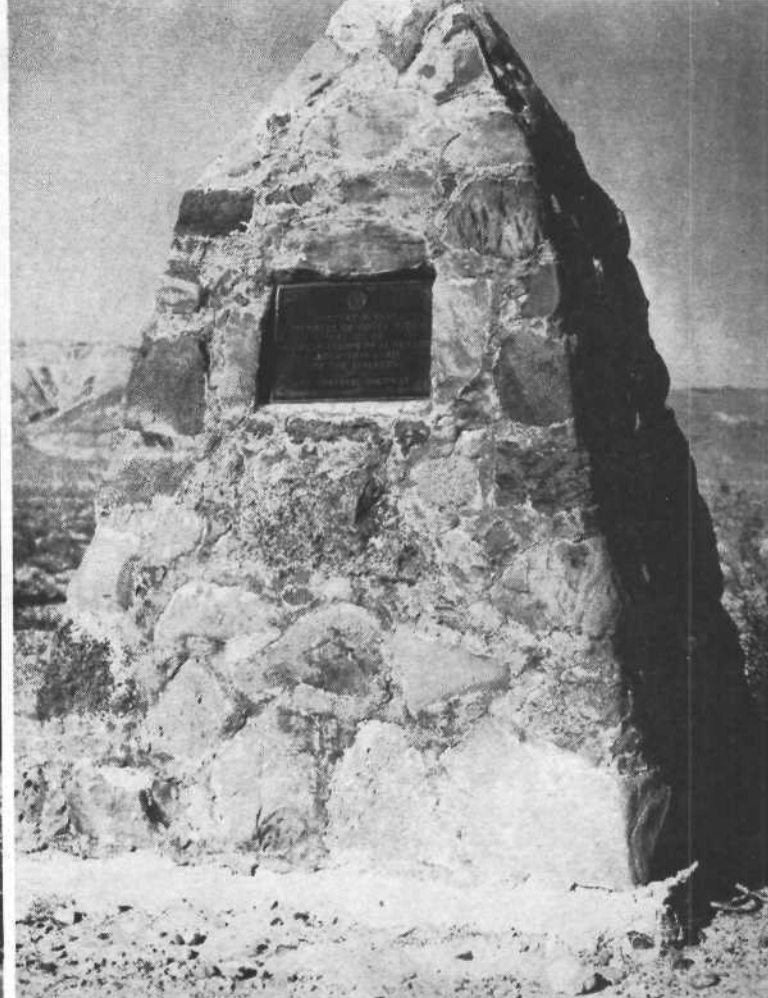
there's a new road down through Mason Valley and Vallecito and Sweeney Pass and across west of the Coyotes to Highway 80. It's called the Imperial Highway, and while it isn't oiled and is washboard in sections, it offers easy going even for the average tourist.

I have watched the progress of the Imperial Highway with mixed feelings these past few years as it edged its way down into the desert. I knew it would open a wonderful section of mountain-desert to many who would understand and appreciate the country, and who would not have come but for the new road. That is good. But also, that country would be opened to many who should never enter it. I hate to think





*Robert Crawford, park custodian at Vallecito and Agua Caliente for San Diego County. He is shown here at one of the springs being developed at Agua Caliente to supply more drinking water.*



*Boyce Aten Post of the American Legion at El Centro erected this monument in 1933 when they grubbed out the right-of-way for the new Imperial Highway. After long delay, the highway has been brought to the cairn.*

there on, up the sandy wash and side canyon, we progressed on a one-mile-per-hour hop spin and jerk basis. We did reach the foot of the zigzag dugway up the south side of Sweeney Canyon, but a hike up its twists convinced us that Bob Crawford was right. This dugway had been constructed by Everett Campbell of Vallecito and his crew in December, 1932. It looked as if it had received but little maintenance—and no widening—since. Long hours of shovel and fill would be necessary to take care of slides and washes before we would dare attempt to climb it. So we backtracked across Carrizo wash to Mountain Palm Springs to camp for the night.

In the morning we followed the Butterfield Trail out by Carrizo Creek rather than to return the way we had come. For this is the approximate point where the old Butterfield and the new Imperial Highway part company. The stage route—and also the more ancient trail which was followed by Spaniards and early trappers, by Kearny and Emory and Cooke and the Mormon Battalion, by the California Gold Rush emigrants—headed almost due east here, following down Carrizo Wash between the Fish Creek

Mountains and the Coyotes, then heading southeasterly to cross today's Highway 80 between Plaster City and Seeley.

Originally the new highway also was to have followed down Carrizo Wash. Even in 1949 the question had not been finally decided. But the route up Sweeney Canyon and west of the Coyotes was favored because less new construction would be required and maintenance problems would not be so great. Also, along the Carrizo Wash route there was the problem of the Navy, which had withdrawn an area including part of the old road and was actually bombing on the ruts of the Butterfield Trail.

We had been warned that since the Navy had officially blocked the lower end of the trail, there was little traffic down to the ruins of Carrizo stage station, and the road was in bad shape. We found it primitive indeed, in deep soft sand part of the way and completely obliterated where cattle had trampled the bed of Carrizo Creek. But aside from pleasure in tracing the Butterfield through, the trip was valuable for a striking exposition of the manner in which occupation or interests influence viewpoints.

At the ruins of Carrizo station—

now just a trace of wall and a mound of adobe—one of the men running cattle in the area had his camp. We talked desert for a while, then he queried: "Were you folks out here when the flowers were blooming so wonderfully?"

Lucile started to exclaim over the beauty of that flowering season, but he went on: "A wonderful year, the cattle sure did well on them. Don't know what it is about flowers, but they sure did well!" Since then we've always grinned a little wryly when someone remarks: "It's a wonderful year for flowers."

Since we'd failed to make it through on the Imperial Highway from the north, we determined to try again from the south so we would at least have seen the whole route. Early in 1950 we got around to that trip, stopping en route at Eva Wilson's home in El Centro. When Eva learned of our plans, she suggested that we also look up a petrified wood field she had found some years before northwest of Coyote Wells and near the San Diego-Imperial county line.

Eva had been botanizing with a friend at the time, and was investigating the twin-rut desert trail that carried the elegant name of "Imperial

Highway." After miles of rough going she encountered a broad sand wash that would spell disaster for her car. So she parked south of it, and the two walked on, finally reaching low hills where they found an abundance of the dark petrified wood typical of that desert, and some reddish wood that was not so common. But by the time they hauled their rock back to the car, they had completed a nine-mile trek. The wood was good, but once was enough and they hadn't visited there again.

We followed Highway 80 from El Centro to a point two miles beyond Coyote Wells — the Ocotillo turnoff. Slanting northwest from Ocotillo, the Imperial Highway made a brave enough beginning. In January, 1933, Legionnaires from El Centro's Boyce Aten Post had grubbed and graded it as far as the San Diego County line, where they erected a monument.

Beyond the county line, even when we were there in 1950, the highway was no more than a winding desert trail. But it was a picturesque trail, and we enjoyed the winding climb to the Sweeney Pass dropoff. The dugway itself was in even worse condition than it had been the year before and looked as if the only vehicles using it were narrow-gauge jeeps.

We turned back, rockhunting as we went. There were small pieces of petrified wood scattered over the rolling slopes leading up to Sweeney Pass. The wood apparently was weathering from a narrow conglomerate laid down at one particular level. Farther south we stopped again and hunted in the hills to the west of the road, that Eva had told us about. We found petrified wood there sufficient in quantity and good enough in quality for a *Desert Magazine* field trip. Unfortunately, some bad road, and washes which might trap inexperienced drivers lay between it and the highway.

So when we received George Kellogg's letter, we had a number of reasons for a return trip to Imperial Highway—not the least of which was to discover whether Sweeney Pass really had become a high speed road. It was in March of this year that we finally made it—and there were clouds over the Colorado Desert and snow falling on the Lagunas when we left El Centro.

The stretch of Imperial Highway from Ocotillo to the county line was just about as we remembered it — though a little wider and straighter, and possibly a little rougher. But in San Diego County the old trail had been abandoned. A new, broad, straight graveled road invited us on to the northwest. It was, indeed, the sort of highway George had written us about, and the American Legion

## IMPERIAL HIGHWAY LOG

### SOUTH—

From Highway 78 to Highway 80

00.0 State Highway 78 at Scissors Crossing, head south.

17.7 Vallecito stage station and picnic area, west of road. San Diego County park.

21.7 Agua Caliente Hot Springs, west of road. San Diego County park.

30.1 Turnoff, right, to Mountain Palm Springs oasis, in Anza State Park.

33.1 Top of Sweeney Pass.

35.3

to

38.3 Hills with petrified wood to west of road.

38.9 San Diego-Imperial County Line and Imperial Highway Monument.

45.5 Ocotillo.

46.5 U. S. Highway 80.

### NORTH—

From Highway 80 to Highway 78

00.0 Ocotillo turnoff from Highway 80, approx. 2 miles west of Coyote Wells.

01.0 Ocotillo, turn northwest.

07.6 San Diego-Imperial County Line and Imperial Highway Monument.

08.2

to

11.2 Hills with petrified wood to west of road.

13.4 Top of Sweeney Pass.

16.4 Turnoff, left, to Mountain Palm Springs oasis, Anza State Park.

24.8 Agua Caliente Hot Springs, west of road. San Diego County park.

28.8 Vallecito stage station and picnic area, west of road. San Diego County park.

46.5 State Highway 78 at Scissors Crossing.

monument beside it no longer looked out of place.

The new road cut right through the corner of Eva's petrified wood hills. Not only was the field open to rockhounds — but the rockhounds were there in force. There were six cars of them in the hills the day we were there.

The sight tended to confirm my belief that mapped field trips are not responsible for areas being stripped. Here was a field which had been open to the general collector only a few months. To the best of my knowledge it had never been "written up" or publicized to any degree. Yet the rockhounds were busy and the petrified wood will all be gone in time, whether a story about it is published or not.

But when a mapped trip to any field is published, it does assure that when most of the collecting rocks from that field are gone, they will be scattered in the hands of many rockhounds, rather than being piled up in the yards of a few.

We drove off the road at several places in order to check the quantity of wood — and we found that auto trails, new ones, wound in and out among most of the little hills. The

petrified wood here is found mixed with a sort of coarse cobblestone pavement made up of desert varnished rocks. These rocks are quite large in size but the manner in which they are packed together and their rounded appearance make it seem likely that they were deposited here by water.

Much of the petrified wood found on the Colorado Desert is little better than specimen material. William P. Blake, geologist with the railway survey through this stretch of country, described it well back in 1853: (The specimens) "are generally of a brown color, and retain all the appearance of wood; the grains and knots show distinctly, and resemble the wood of the mesquite. The surfaces of these specimens were also curiously polished, and some of them appear to have been deeply cut and grooved by the moving sand."

In addition to the usual brown sili-cified wood, the hills along the Imperial Highway contain some specimens — greyish, greyish with red patterns and a few all red—that have perfect grain replacement and are fine cutting material. There still is a good deal of wood of various kinds scattered over the rocky hill slopes, and there should be for a long time for those who like to hike and hunt.

Cold rain driven by an icy wind off the snow mantled Lagunas cut our rockhunting short, and we continued north along the new highway. Sweeney Pass was a revelation. The highway engineers had taken care of it with an "S." They had cut the new road along the hill edge to keep it out of the wash below, and had packed a good, hard crossing over big Carrizo Wash. In a matter of minutes we had traversed the old mile-an-hour stretch and were at the Mountain Palm Springs turnoff.

This stretch of five and one-half miles of new road, from Carrizo Wash through Sweeney Canyon and to the county line, cost \$10,000 for new construction and \$30,000 for decomposed granite surfacing. We think it was a bargain, and that many a future visitor will bless San Diego County for the work.

We were due back in Twentynine Palms that night, so we drove on rapidly to the north, stopping for a brief visit with Mary Smith at her tiny store at Agua Caliente, and pausing for another look at Vallecito station. And we wished, when we reached State Highway 78 at the Scissors Crossing, that there was time to continue on up Imperial Highway past Warner's Stage station, and Warner's Hot Springs and perfectly preserved Oak Grove station. Visitors should, as much as possible,



follow the old Butterfield—or the new Imperial Highway—all the way.

Sometimes it has happened that good roads like the new one through Sweeney Pass are opened in the desert, then permitted to go to ruin under the assaults of the weather. I hope that will not happen with this new stretch, and I doubt that the Imperial Highway Association will permit such an occurrence. In fact it seems certain that in time this entire link will be paved.

But desert lovers shouldn't wait for that time and become involved with the traffic rush that will follow. Now is the time to visit the legend-rich land along the Butterfield—while it still is relatively untouched, still peaceful and unchanged.

Even after paved Imperial Highway is a reality, there is the consolation that the new road does not exactly follow the old trail. Places will remain where you can see and trace the actual ruts of the stage line. You can see them when you look down into Vallecito from the pass between it and Mason Valley. You can reach the rutted trail east of the highway below Agua Caliente, where the station of Palm Springs once stood.

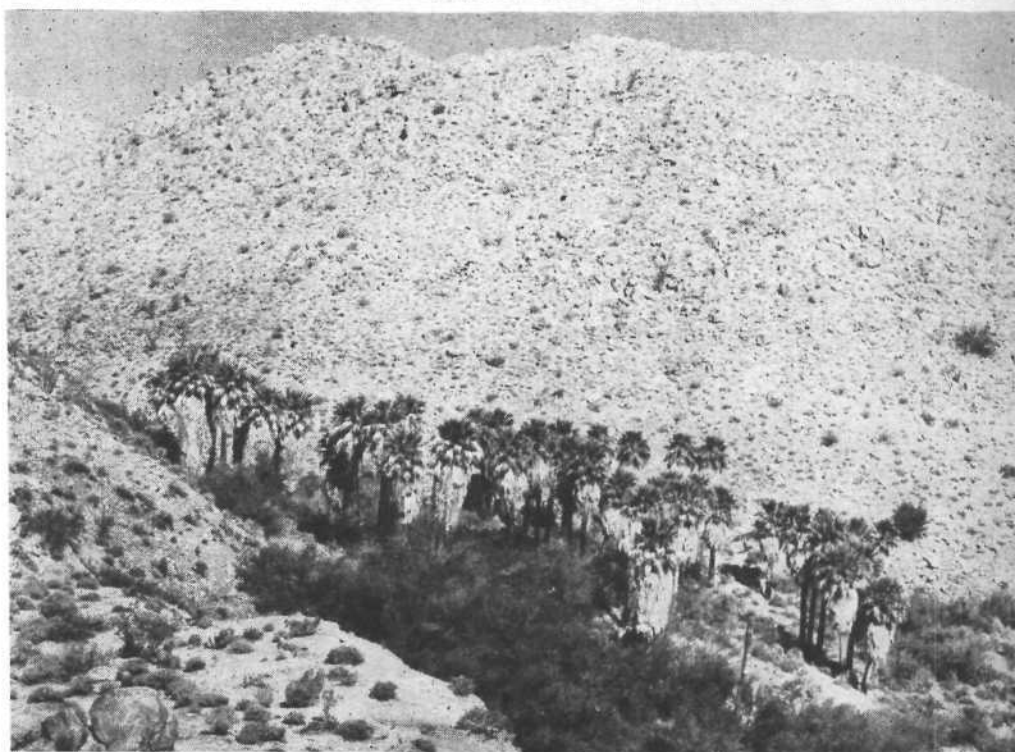
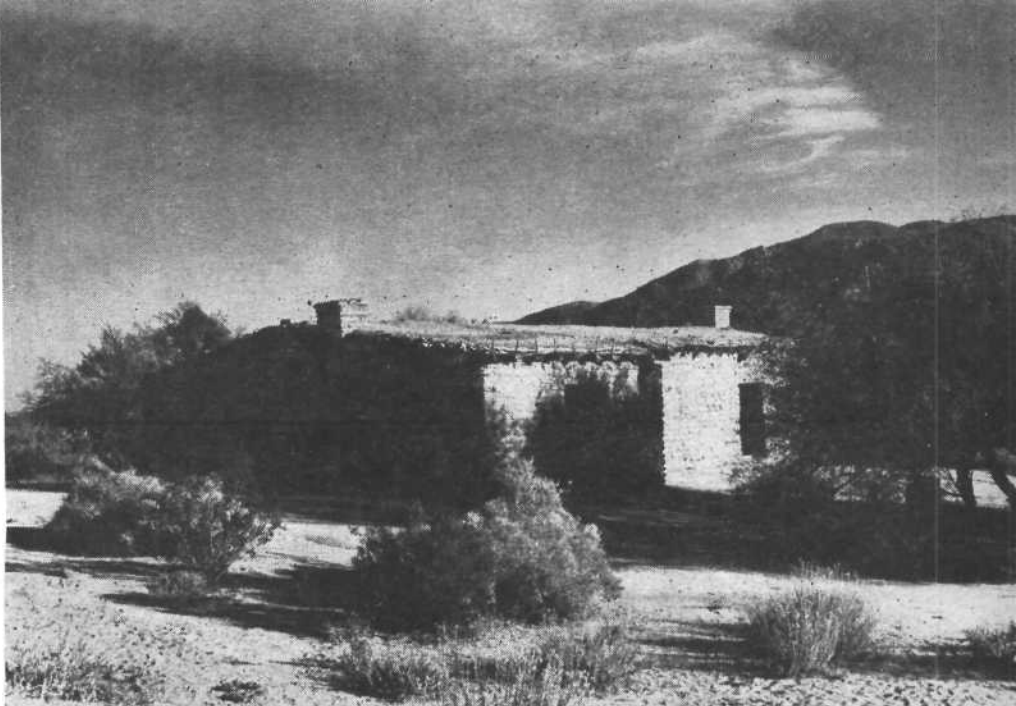
Best of all, the highway and the old trail part company north of Carrizo Wash. When the highway traffic of the future roars past Vallecito stage station, and picnickers swarm over it, I imagine the ghosts of Butterfield days will desert the old sod station. But they'll have to congregate somewhere, and if we leave the pavement and go down the wash toward Carrizo and camp by the old trail of a moonless night we may find it still just as Marshal South visioned it:

*And again across dune, wash and mesa  
As the dead years turn back on their  
page  
Pass the dim racing teams from a  
ghost-world of dreams  
Down the tracks of the Overland  
Stage.*

*Top — Vallecito stage station,  
watering place on the Butterfield  
road. Through the efforts of Mr.  
and Mrs. Louis Strahlmann of San  
Diego the old adobe station was  
restored several years ago and is  
now a San Diego County park.*

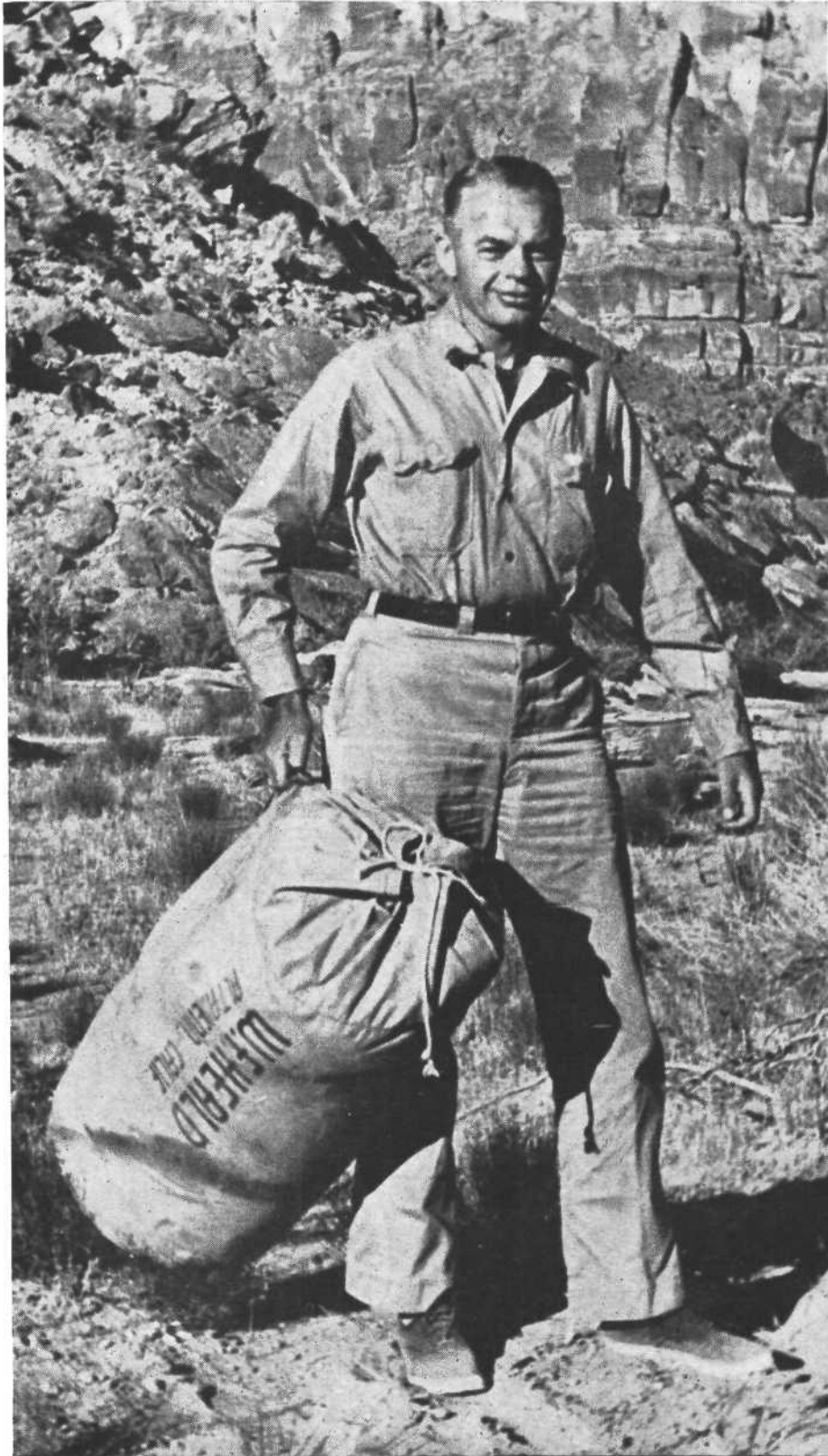
*Center—One of the palm groups  
in Mountain Palm Springs oasis.  
These native palms grow not far  
from the new Imperial Highway.*

*Bottom—Numerous fine stands of  
cholla cactus grow along the new  
road. This is *Opuntia bigelovii*,  
also known as "jumping cactus."*



# Writer of the Chiricahuas

*This photograph of Weldon F. Heald was taken by Alfred M. Bailey in 1945 when the two men made the scenic boat trip from Mexican Hat to Lee's Ferry with Norman Nevills.*



Many readers of Western books and magazines are familiar with the name Weldon F. Heald. He is a prolific writer and photographer of Western non-fiction stories. Weldon and his wife, Phyllis, have a home in the Apache country of southeastern Arizona—and here is the story of why they went there and what they have found to interest them in that remote mountain wilderness.

By DOR WOODS

**D**URING WORLD WAR II Weldon F. Heald was assigned to duty with the Arctic, Desert and Tropic Information Center — an organization set up by the Air Force to study climatic environment and determine the proper clothing, food, shelter and equipment for use by troops under varying conditions.

Heald was sent to the Southwest desert country to determine what soldiers should eat and wear in zones of high temperatures.

Weldon had always liked the mountains — and his tour of duty in the Southwest gave him an intimate acquaintance with the desert ranges of Southern California and Arizona. In the desert mountains he found a vast rugged domain that provided ideal living conditions, and also the opportunity to explore and pursue his hobby of photography.

As a result of this experience, Weldon and Phyllis Heald in 1947 sold their home on the hillside above Altadena, California, and bought the 8000-acre Flying H Ranch in the Huachuca Mountains of southeastern Arizona. They found here an ideal retreat from the crowds, the smog and the high tension of metropolitan life.

Weldon Heald is a native of New Hampshire and spent most of his early life in Boston. At the Massachusetts Institute of Technology he studied architecture. Then he came to California and here met Phyllis Warde who had come from New Rochelle, New York. They were married in 1930.

His interest in mountains began when he was eight, during a visit to Europe with his parents with whom he spent some time in the Alps in Switzer-



land. As he grew older his desire to know and climb mountains became an absorbing avocation.

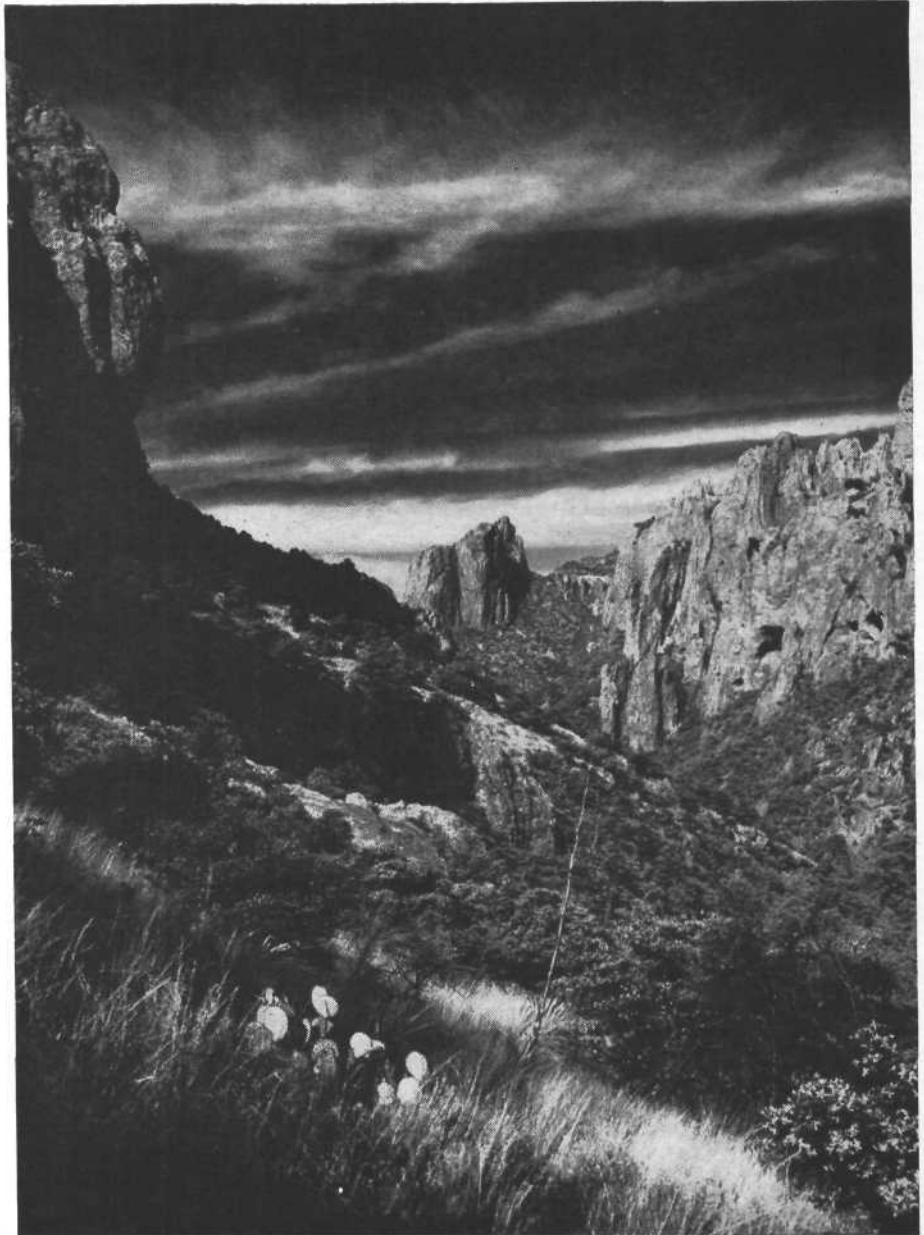
He began an intensive study of everything to do with mountains; their geography, geology, climate, botany, glaciology, etc. This brought about diversified activities and exploring expeditions. During these years he climbed mountains in four continents. He has collected one of the foremost private libraries in the country dealing with mountains.

He ran a pack train in the Washington Cascades; navigated the Colorado and San Juan Rivers in 15-foot boats; has done extensive photography in black and white and color. He is past vice-president of the American Alpine Club.

During the years after he came to California, Weldon's interest turned from architecture to writing, and after he and Phyllis were settled on the Arizona ranch in the heart of the old Apache country he realized that here was a fertile field for writer and photographer. He made many trips into the little known mountain areas in southeastern Arizona and during the last four years has sold numerous illustrated feature stories, featuring the Huachuca and Chiricahua landscapes. He has been a contributor to three volumes of the American Mountain Series. One of these, *The Inverted Mountains*, deals with the canyon country of northern Arizona and southern Utah. He has sold over 100 feature stories to 35 different magazines, and has edited and written much of the copy for 12 Scenic Guide books covering the western states.

With writing assignments taking more and more of his time, he and Phyllis found the management of a big ranch an almost impossible chore, and so they sold the Flying H, reserving a rambling home with a panoramic view of the vast San Pedro Valley for their own occupancy. Here Weldon organized the Huachuca Writers, composed for the most part of persons who aspired to produce novels, poems, song-poems, articles and photographic features for the free lance market. Members of the organization pay high tribute to Heald for the help he gave them in developing their writing talents and finding markets for their material.

More recently the Healds have purchased another home in the Apache country. They acquired the Painted Canyon ranch near Portal in the heart of the Chiricahua Mountains, and that is now their home. "If you are one who likes to explore in the high rugged desert wilderness country," says Wel-



*In this rugged Chiricahua Mountain country the Apache Indians once defied the U. S. Army. This is the region selected by Weldon and Phyllis Heald for their home.*

don Heald, "just head for Portal. It is the entrance to a vast little-known region of rocked canyons, colorful formation, lofty evergreen forests and cool mountain streams. This is truly a scenic wonderland."

Although residing in a remote region, Weldon keeps in close touch with every part of the West. He is a writer, climatologist, photographer, lecturer, explorer and teacher to whom many people come for companionship and counsel. His warm personality has made many friends and his enthusiasm is an inspiration to all who associate with him.

He takes an eager interest in people—and also in his mountains. His philosophy is best expressed by John Muir: "A thousand wonders are calling; look up and down and around about you."

#### **SCHOOL IS PLACING YOUNG INDIANS IN BUSINESS JOBS**

Phoenix Indian School now is answering to its own satisfaction the old question of what do to with the Indian.

For years the school merely presented its seniors with graduation diplomas, then placed them on buses for return to the hogans from which they had come. But now, under a program of vocational training inaugurated five years ago, the school prepares graduates to earn a living in city industry instead of returning them to the reservation where the economic outlook is so bleak.

This spring the school will place 29 seniors and 55 special training students with the expectation that 90 percent of them will take their place in the economic society of the white man.—*Arizona Republic*.

# Mines and Mining

## Kanab, Utah . . .

Shipment of the first carload of ore from the King Manganese Mine 35 miles east of Kanab was made in April. With many thousands of dollars invested in good equipment, plenty of water for washing and a 'round-the-clock work shift, the big mining operation is expected to produce high grade manganese in sizeable quantities for shipment direct to steel mills and other users.—*Kane County Standard*.

## Goldfield, Nevada . . .

M. McPherson, diamond drill manager for Newmont Mining Company, recently examined the site his company has chosen for diamond drill exploration near Goldfield. At least two holes will be put down to an unannounced depth in preliminary operations.—*Tonopah Times-Bonanza*.

## Independence, California . . .

What gives reasonable promise of being one of the world's most valuable tungsten deposits, on the west slope of the Inyo Mountains east of Independence, now is being opened through completion of an access road which "couldn't be built." Not long ago, engineers spent almost \$25,000 surveying the area to decide a road to the tungsten-rich Jumbo Mine was impossible. By April, after little more than one year of work, the road was nearly to the mine adit.—*Inyo Independent*.

## Humboldt, Nevada . . .

A five-year lease-option agreement on Churchill County tungsten claims, involving a consideration of \$65,000, has been announced by Clarence Staggs of Golconda and Angelo Quilici of Lovelock. Ore assays about two percent tungsten. Development will be undertaken by the Cordero Mining Company of San Francisco, which also plans further exploration of claims near Eastgate.—*Humboldt Star*.

## Battle Mountain, Nevada . . .

Development of open pit mine operations 30 miles south of Battle Mountain are reported moving ahead steadily. The mine, owned by S. J. Welter, is being operated by John Uhalde and associates. It is estimated 100,000 tons are available on the property, the ore averaging about 62 percent iron. The property was first located 50 years ago, but little development was made until present operations began. — *Reese River Reveille*.

## Tucson, Arizona . . .

Approval of a \$111,288,000 loan to San Manuel Copper Company, to put Arizona's largest low-grade copper mine into production, has been promised by the Reconstruction Finance Corporation. The mine, located 45 miles north of Tucson between Oracle and Mammoth, has been under development for the past six years by San Manuel, a wholly owned subsidiary of Magma Copper Company, which operates the mine, mill and smelter at Superior. Harry A. McDonald, R.F.C. administrator, said it would be the largest business loan ever made by R.F.C.—*Arizona Republic*.

## Searchlight, Nevada . . .

Its bonanza days are long past, but mining is not gone altogether from Searchlight, in the far southwestern corner of Nevada. There are a dozen or more miners working old claims, and small operations are still going on at the old Quartette Mine, famous in the early days of the boom camp. Six men are working with the Desert Drilling Company running the Quartette's tailings and dumpings through a mill at a daily rate of approximately 30 tons. The Yellow Pine Mine, noted for its millions in production of silver, lead and zinc ores, also still yields good value in places.—*Las Vegas Review-Journal*.

## Winnemucca, Nevada . . .

Gus Rogers, mine operator, and Harold E. Reed, prospector, both of Winnemucca, are partners in the operation of a group of quartz claims in the Scossa mining district in Pershing County. Reed is using a dry washer to test hot spots in the vein outcrop, claiming he gets better results by this method than by panning with water.—*Mining Record*.

## Tombstone, Arizona . . .

Lomelino Interests, which for the past year has been operating the ore reduction mill at Tombstone, revamped its organization under the title, Shannon Mining Company after taking over the old Shannon Mine at Gleeson. Extensive operations now are being readied. Large lead and zinc deposits are found at the mine, where a 16-foot face is exposed in one place. The Shannon has been operated for many years, but until now these minerals were ignored, due to lack of demand and low market price. — *Tombstone Epitaph*.

## Winkelman, Arizona . . .

To assure continued production of copper from the Christmas Mine in Gila County, government officials have announced a contract to pay above-ceiling prices to the Sam Knight Mining Lease, Incorporated, of Winkelman. Under the two-year contract, the Christmas will be operated at its current rate of production — 1,195,000 pounds of electrolytic copper annually. The government guarantees a price of 31.6 cents a pound, compared with an existing ceiling of 24.2, F.O.B. refinery.—*Arizona Republic*.

## Kingman, Arizona . . .

"Today's new techniques in metallurgy and mining, plus vastly improved machinery, should make mining of chloride ores profitable on a long-range scale," according to Elwood Dietrich of California, lessee of the Gladstone Mine in the chloride mining district of Arizona. Dietrich expressed hopes of a smelter being established in the area to process lead, zinc and copper from local producers.—*Mining Record*.

## Ibapah, Utah . . .

A "significantly large supply" of critically needed quartz crystal has been located on the Goshute Indian reservation near the Nevada border, according to Jess Larson. The find reportedly represents the first important strike of domestic quartz since the new hunt for the material began. Quartz crystals are vital to the manufacture of electronic and radio equipment.—*Mining Record*.

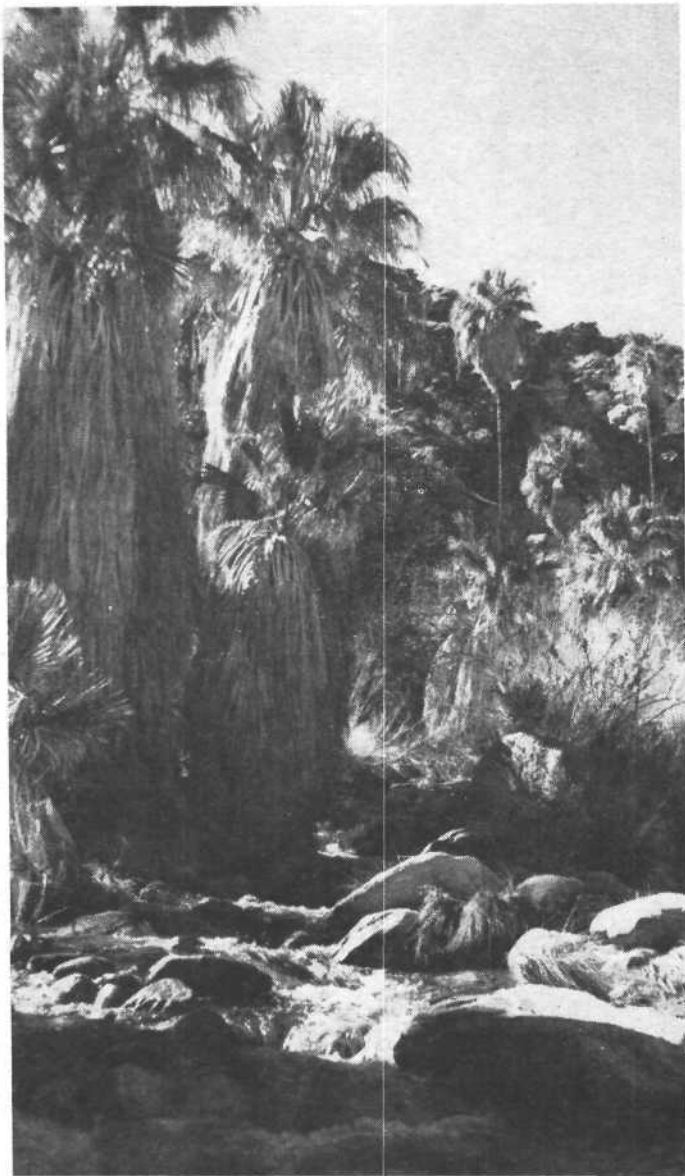
## Las Vegas, Nevada . . .

Early construction of an electrolytic zinc reduction plant four miles east of Henderson and adjacent to the manganese ores mine and mill is planned by Electro-Metals, Incorporated. The proposed pilot plant would produce 15 tons of zinc dust per day by a leaching and electrolytic process which treats oxide zinc and carbonate lead ores.—*Pioche Record*.

## Goldfield, Nevada . . .

W. H. Allured has announced his company, the Garnet King, plans to erect a 100-ton mill on tungsten property in the Cucamonga mining district of Esmeralda County. A permanent camp now is being built on the property, which formerly was owned by Roper and King, and work on the mill structure is expected to begin soon. Ore near the surface will be stripped off. According to Allured, it will be some time before operations must go underground for the rock.—*Goldfield News*.





*The palms with full skirts are believed to be from 75 to 100 years of age. At intervals along Murray Canyon are found aged trees that have been through fire. Some of these probably are 250 years of age.*

## Murray Canyon is a Challenge

Always seeking new mountains and gorges to conquer, members of the Sierra Club of California recently made an all-day ascent along the palm-fringed stream to the headwaters of Murray Canyon near Palm Springs. And here is the story of a canyon that, according to the author, "is both charming and obstinate."

By RANDALL HENDERSON  
Map by Norton Allen

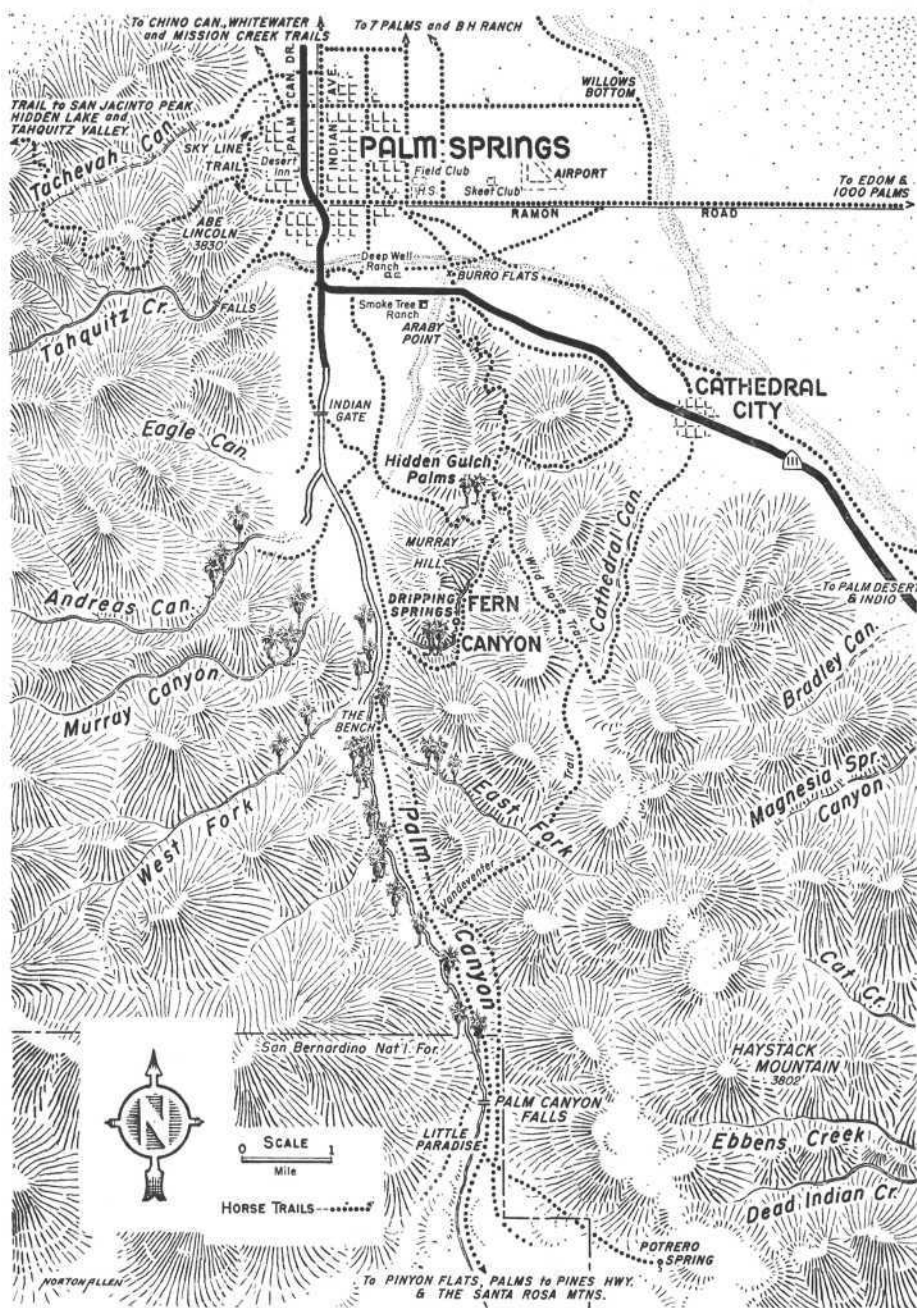
**A**CCORDING TO the stories which have come down from the early days in Palm Springs, Dr. Welwood Murray, who opened the first hotel there in 1886, was a stalwart Scotsman whose rugged individualism sometimes made his neighbors love him, and at other times wish he was back in his native Scottish highlands.

But they thought enough of Dr. Murray to name a library, and a canyon in the San Jacinto Mountains in his honor—and after three trips into that canyon I am convinced it was well named. For Murray Palm Canyon combines some of the most gorgeous scenery with some of the toughest obstacles that ever faced a weekend hiker. Like the character of the man

for whom it was named, it is both charming and obstinate.

My first acquaintance with Murray Canyon was in December, 1936, when with my son, Randie, I hiked up Andreas Canyon to about the 3000-foot level, then climbed over the ridge to the south and dropped down into a lovely oasis of native Washingtonia palms—in upper Murray Canyon.

It was a rugged gorge. We roped down over four waterfalls from 10 to 30 feet in height, and when darkness came we were wet and cold, and our flashlight—like everything else in our backpacks, was full of water—and useless. When we heard more falling water below we decided we had had enough of Murray Canyon for one



day, and climbed up on the ridge on the south side of the canyon and felt our way down over the rocks to the floor of the desert where our car was parked.

Since that first experience I have made two trips up Murray Canyon—and found it more beautiful and more difficult on each occasion. The most recent visit to Murray was early in March this year with a group of Sierra club members.

We arranged with the Agua Caliente Indians through their agent in Palm Springs, Lawrence L. Odle, to camp overnight on the reservation at the entrance to the canyon. Our campsite was inside the Palm Canyon toll gate where the Indians collect 30 cents for each car with not more than three passengers, and 12 cents for each passenger in excess of three.

The gatekeeper is stoical John Joseph Andreas, grandson of Captain Andreas for whom one of the nearby canyons was named. The gate is open from 9:00 to 5:00 daily during the winter season. Money collected at the gate goes into the Indians' tribal fund.

Ninety-eight of us parked our cars on the bajada at the base of the San Jacinto Mountains and spent Saturday evening enjoying one of those impromptu campfire programs which are so important a part of all Sierra club outings. The upper half of the San Jacinto range was carpeted with snow that March evening, and the air on the floor of the desert below was crisp. Most of the Sierras carry air mattresses in their sleeping bags—and these air cushions not only provide comfort but are good insulation against the dampness in the ground.

Dead smoke tree and desert willow wood dragged in from the Palm Canyon arroyo below our camp provided an ample wood supply and a clear stream flowing out of Murray Canyon furnished water for those who did not bring their own supply.

Cyria and I, and Margaret Gerke of the *Desert Magazine* staff, broiled a hamburger steak dinner over our fire. Next morning we had a flap-jack flipping contest in which Cyria and Margaret were tied for first honors, and I ran a poor third because I lost part of one of my cakes over the edge of the frying pan. Camping is fun when you make a game of it.

It had been raining for two days and the stream in Murray Canyon had swollen almost to flood proportions, and with an ample water supply it was not necessary to carry canteens on the hike which started at eight o'clock Sunday morning. Co-leaders on the trip were Dick and Catherine Freeman.

No trail has been built in Murray Canyon. The few people who venture into the gorge have worn a path which can be followed the first mile or two. After that it was a case of pick your own route. Farther up we came to a series of spectacular waterfalls which made it necessary to detour up over the steep slopes of bordering ridges.

The canyon is narrow and in many places choked with catsclaw, mesquite and palm trees. There are a few sycamores and cottonwoods. We had to cross the stream many times, jumping from rock to rock—and getting wet feet if we missed.

The first wild palms in the canyon are visible from the paved road which motorists follow in visiting Palm Canyon. Actually, Murray is a tributary of the Palm Canyon system. From this point the stately Washingtonias are strung along the creek singly and in groups for a distance of four miles. Three distinct generations of palms are seen in the canyon today, all of the *filifera* species. Occasionally we passed aged trees towering 50 to 60 feet in the air—palms that had been through fires and windstorms for perhaps 250 years. Their trunks were charred and weathered. Beside them grows a younger generation of trees perhaps 75 to 100 years in age, green and vigorous and wearing full skirts of dead fronds, evidence that no fires have visited this canyon for many years.

Considering the root system with which Nature has endowed them, these palms live to an amazing age. Their roots consist of hundreds, perhaps thousands, of tiny rootlets not much bigger than a lead pencil and seldom reaching a depth of more than six



feet. They thread their way among the rocks wherever there is moisture—but always close to the surface. Considering the fact that a mature palm 40 feet in height weighs many tons, it is surprising how they withstand the heavy winds which occasionally sweep down these canyons. The explanation probably is in their flexibility. The porous trunks bend easily and the trees sway in the wind, but are seldom uprooted.

Even the veterans of 250 years remain erect and flexible—until eventually an extra blast of wind carries away the little thatch of fronds at their upper tip—and even then the trunk sometimes remains standing for many years before it falls. While the palm generally is as straight as an arrow, we saw trees growing close beside precipitous rock walls where the trunk had become distorted in its effort to surmount a jutting boulder of stone.

Within recent years, a new generation of palms has sprouted in Murray Canyon. We saw hundreds of trees from two to six feet high, giving promise that in future years Murray Canyon will have a palm forest much denser than it is today.

Our trip was a field day for hikers, for botanists, for photographers—and for Ruth Simpson, assistant curator at Southwest Museum, who soon discovered the grinding holes of ancient Indian tribesmen on a great flat rock along the streambed. Wherever there is water on the Colorado desert it is probable that old Indian sites may be found close at hand, but it sometimes requires the sharp eyes of an archeologist to discover the evidence.

Cold weather in late winter had delayed the flowering season in this part of the desert, but many Canterbury bells and wild hyacinths were in blossom. Occasionally we saw a bisnaga just coming into bloom and in sheltered places the encelia was out. A little later the mountainsides above the canyon were covered with the golden blossom of the encelia or incense bush.

The rock which forms the sidewalls of the canyon we were ascending is mostly granite and often we passed through narrow portals where the walls were too precipitous to be climbed. Later, in returning to base camp over the ridge to the south I found float of rose and ivory quartz—but not enough of it to make a field day for a rockhound.

There was some evidence of wild sheep on the mountainsides—probably animals from the Santa Rosa band of bighorns. Thirty years ago the bighorns in this area were almost extinct as a result of the depredations of hunters. But the establishment of a game refuge is slowly restoring the band.



*Above—A drift pile of aged palm trunks bore evidence that mighty torrents have come down Murray Canyon in previous years.*

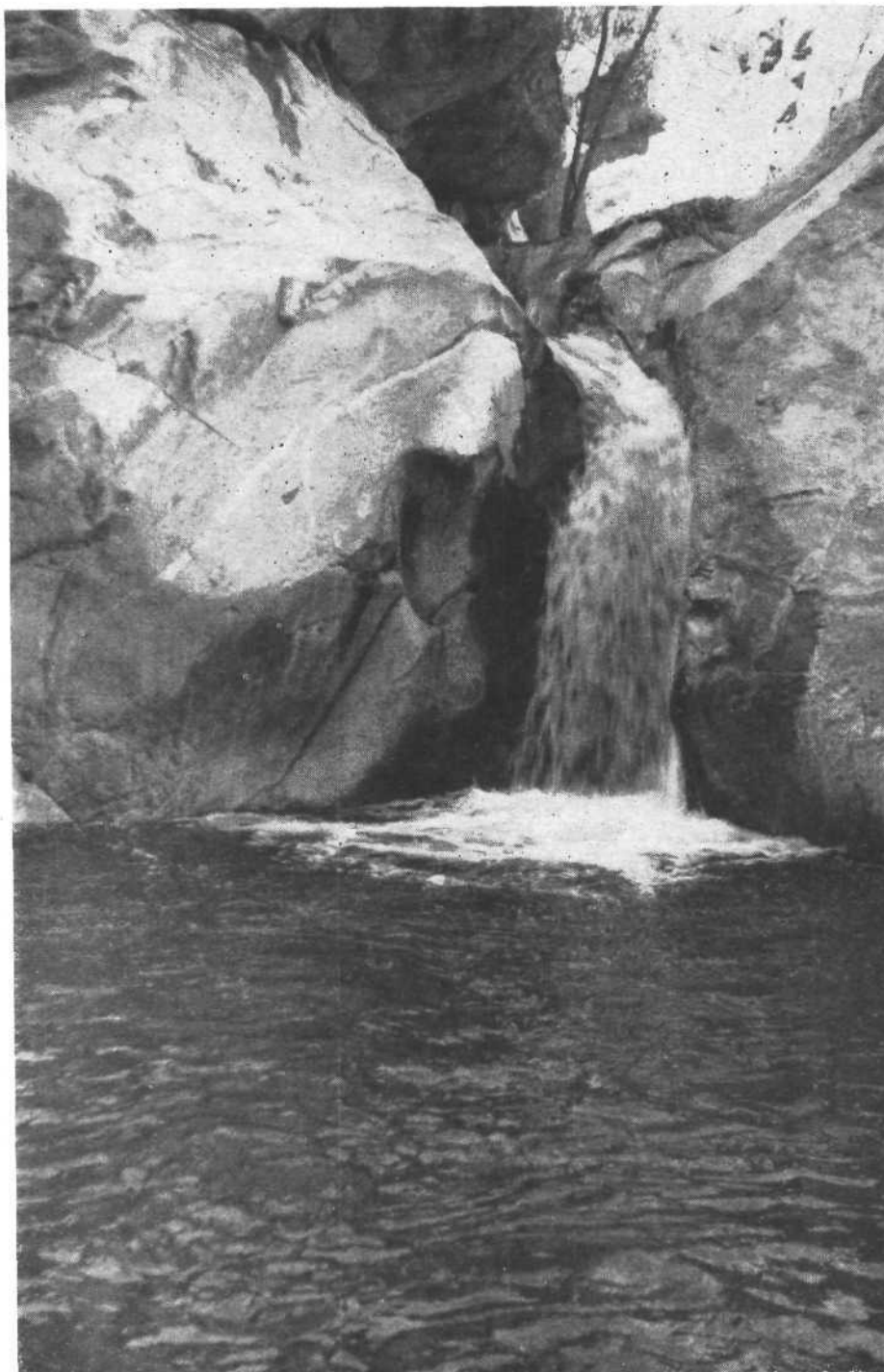
*Below—Here one of the Sierra Club groups is approaching the canyon entrance. San Jacinto mountains in the background.*

Generally they range on the north slope of the Santa Rosa range, but occasionally cross Palm Canyon to the eastern slope of the San Jacinto range.

For two miles our climb was gradual, and although we frequently had to claw our way through mesquite and catsclaw, there were no serious ob-

stacles except the stream, which had to be forded frequently.

Then the canyon floor rose sharply and great boulders blocked the way, making it necessary to detour up the precipitous walls to get around slick rock waterfalls that could not be scaled.



*In upper Murray Canyon the way is blocked by numerous waterfalls—with deep pools below. The hikers found it necessary to detour up the rocky slopes to continue their ascent.*

The Sierrans were strung out nearly the full length of the canyon, the more leisurely hikers going only as far as they found the going not too difficult. Veteran Mountaineers Bill Henderson and Jim Gorin and a little group of seasoned hikers were far up ahead.

At three miles up the gorge we came to two double waterfalls where the stream tumbled over smooth-wall dikes which could not be surmounted. We detoured the first of these double cascades by climbing high up on the ridge to the north. When we dropped down

into the canyon again we had gone only a short distance when we faced another double waterfall—and I recognized this as the place where Randie and I had roped down into a pool so deep we had to swim out with our packs on our backs—and this was the place where we had climbed out in the dusk on our first excursion into Murray Canyon.

Ferns were growing in the crevices around the waterfalls, and from somewhere above I could hear the call of a canyon wren. It is an idyllic spot—but one that is guarded well by cats-

claw jungles and rocky walls. Georgia White and Tom Corrigan dived into the 10-foot pool of water at the base of the lower fall, and came out shivering with cold. It is a delightful little swimming pool — but one that will never be overcrowded.

Jim Gorin and I carried counters to tabulate the palms in the canyon, and up to this point had recorded 548 trees over three feet in height. In the next half mile above the waterfalls there were another 171 trees. Bill Henderson, the only member of our party to go beyond that point estimated there were another 150 palms farther up—making a total of 869 palms in the canyon. This is nearly three times as many palms as are in Andreas Canyon, which is much better known to visitors in this area, and gives Murray credit for having one of the finest stands of wild palms in Southern California. In numbers it is exceeded only by Palm Canyon. Borrego Palm Canyon has 778 trees.

It required four hours of steady going to reach the canyon floor above the waterfalls, and then we climbed to the ridges above and returned to our base camp by an easier route than the ascent had been.

At the uppermost point of our ascent we were less than eight miles from Palm Springs—the desert's most glamorous winter resort community. And yet so rugged is the scenic beauty of Murray Canyon that probably not more than three or four among Palm Springs' annual half million visitors ever see the palm-fringed pool in the upper canyon where we ate our lunch.

Like the man for whom it was named, Murray Canyon is both obstinate and charming.

#### **BONES INDICATE ARIZONA INHABITED IN 8000 B.C.**

As they continued to uncover evidences of a 10,000-year-old mammoth in the border town of Naco, south of Bisbee, Arizona, archeologists became more and more convinced they had made one of the most important finds in Arizona history. The prehistoric animal's bones were discovered by a father and son in an eight-foot arroyo. Imbedded in the remains were five spear points.

Dr. Emil W. Haury, director of the Arizona State Museum, called the find "definite proof" that early Arizona man hunted and killed with weapons. He recognized the spear tips as "Clovis fluted points," first used in Clovis, New Mexico, about 10,000 years ago.

When the excavation is complete, the giant fossil will be taken to the University of Arizona at Tucson where it will be prepared for exhibit at the state museum on the campus.—*Arizona Republic*.



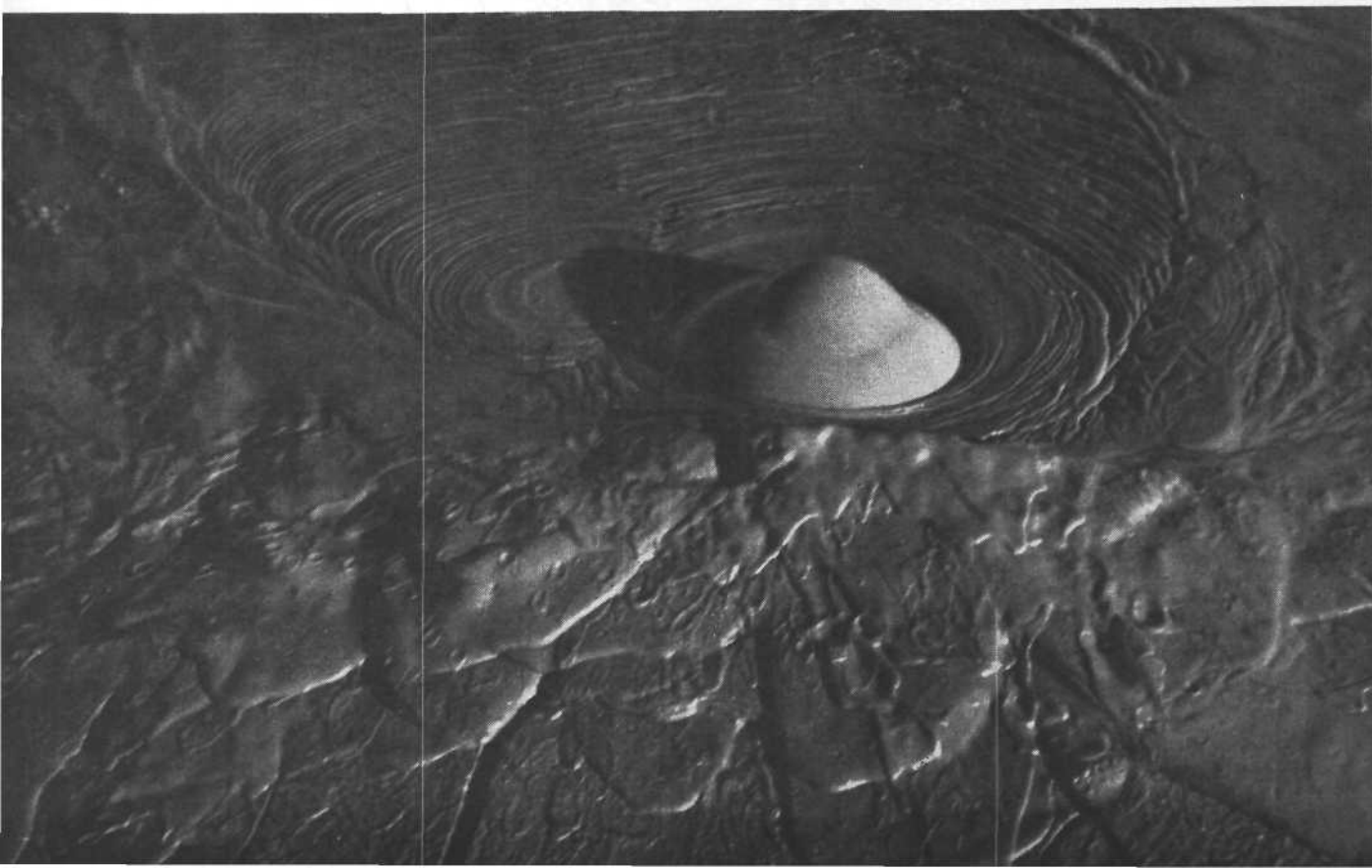
# *Pictures of The Month*

## *Desert Playground*

First prize in Desert Magazine's Picture of the Month contest in April was awarded to Edward Canby, Palm Springs. The picture is of his children, Judy and the twin boys, Tommy and Dickie. Taken with an 8x10 Eastman View camera, K-2 filter, Triple Pan film f32 at 1/50 second.

## *The Mud Egg*

Norm Moore of Inglewood, California won second prize with the accompanying picture of one of the mud bubbles which are constantly active in the mud geyser along the shore of Salton Sea near Niland, California. Taken with a Press camera, 1/25 second at f32 on Super XX film.



In filming "The Battle at Apache Pass" which Betty Woods writes about for this issue of *Desert Magazine* Director George Sherman felt it was necessary to take some liberties with history in order to bring into the play the two best known names in the chronicles of the Apache Indians.

In the film Cochise and Geronimo face each other in a bitter personal feud. Historically, Sherman points out, this did not happen. At the time that Cochise headed the Chiricahua tribe of the Apache nation under Mangas Colorado, Geronimo was too young to lead anything but games among his playmates. This was 1863; Geronimo didn't begin his blood-spilling tactics until almost 20 years later.

"Their clashes on the screen are so powerful that no historian would have the heart to object," Sherman believes.

The screen version of the domestic lives of Cochise and Geronimo also varies from historical fact. Cochise had four wives, Geronimo had seven. In the film, Geronimo is unmarried; Cochise is deeply in love with a solitary wife, Nona, played by Susan Cabot.

Other parts of the screen story adhere very closely to the realities of the Apache war.

Historians recorded that when a small boy, Mickey Ward, was kidnaped by Indians, Cochise was blamed wrongly. When he denied possession of the boy, Lieutenant Bascom strung up several Indian hostages to the nearest tree. Later it was proven that the Coyoteros abducted the youngster. Many years later the same lad showed up again, now known as Mickey Free, 37, an unscrupulous squaw man and scout for the army against Geronimo.

"The Battle at Apache Pass" authentically tells the first experience of Apaches in the face of artillery. In the movie it is a pitched battle between Apache tribes and cavalymen. Actually, the battle was fought against members of the California Volunteers headed east for Civil War service. Captain Tremony commanded troops that were doomed until howitzers turned the tide of battle.

The Apache Pass of history is in the Chiricahua Mountains in southeastern Arizona. Since the film was to be in technicolor, it was decided to stage the screen play near Moab, Utah, in order to use the more colorful terrain of that region as a setting.

Twenty-six-year-old Robert Crompton, author of "Methuselah of the Junipers," is by background and inclination a desert rat.

Born in Mina, Nevada, he moved with his parents to Tenabo, 70 miles southwest of Elko, when he was eight years old. In Tenabo his father was "captain" of a gold dredge. Young Robert had his own dry-washer and spent Saturdays and after-school hours washing for placer gold. "I shall never forget the thrill," he writes, "when, as a boy of 13, I found a half-ounce nugget."

The Cromptons moved to Tremonton, Utah, not long before Robert entered the Air Force in 1944. Upon being discharged in 1946, he enrolled at Utah State Agricultural College and

was graduated in 1949 with a degree in journalism.

He became acquainted with Old Juniper while at college. "Many times during my stay there I hiked the three miles—almost straight up—to where the stately old giant clung to the mountain side," he remembers. "Not as imposing perhaps as many trees, its gnarled old limbs and sagacious pose on a huge boulder gave it an incomparable personality." He and Old Juniper became fast friends.

Crompton currently is managing editor of the *Box-Elder News-Journal*, a semi-weekly paper published in Brigham, Utah, and also does freelance writing for publications ranging from fact detective magazines to newspaper supplements.

## Hard Rock Shorty of Death Valley



"This place must be a great deal like the Sahara desert," remarked one of the tourists who had stopped at the Inferno store to ask about the location of Death Valley Scotty's mine.

"Do you ever see any ostriches or camels wandering around over these barren sand dunes?"

"Not any more," said Hard Rock Shorty. "Usta be some ostriches here, but Ol' Pisgah Bill got rid of 'em. They wuz too dumb to do any work, an' they kept eatin' up his grub. He finally gave 'em all to the zoo down in Los Angeles."

"Bill had a good idea—only it didn't work. It was back in the old days when the wimen wuz all wearin' ostrich plumes on their hats. Ostrich farms wuz springin' up everywhere. Bill read in the papers about a big ostrich ranch down in Phoenix which sold \$60,000 worth of feathers in one year."

"So Bill sent to the gov'ment printin' office an' got all the information he could about ostriches. The more he read the more certain he was that them big birds 'd thrive in Death Valley. 'They eat anything,' he explained, 'an' they don't drink

much water. Death Valley's just the place fer ostriches."

"The next winter Bill hit a purty good pocket in that gold mine o' his over in the Panamints, an' as soon as he got his returns from the mill he sent down to Phoenix to buy a couple o' them ostriches."

"Bill's idea wuz to make 'em work fer a livin'. He'd train 'em to pack out ore like a burro, an' when pluckin' time came he'd gather a few feathers—and that would be an extra bit o' profit."

"Trouble wuz, them ostriches did jes what all the books said they'd do—they ate everything. Second morning after Bill got 'em into camp up in Eight Ball crick one o' them big birds stuck his head in the window o' Bill's little shack an' swallowed Bill's can o' coffee. The other bird saw what wuz goin' on and it reached in an' took the coffee pot in one gulp. Bill had to keep the house locked, the windows closed, and all his tools out o' sight, cause them birds jest gobbled up everything layin' around."

"An' to make it worse, the only way Pisgah could get 'em to pack rock wuz to walk ahead of them carryin' something to eat. They wuz too dumb to learn, an' the burros didn't like 'em either."

"The final showdown came one mornin' when one of them ostriches walked into the mine tunnel and swallowed three sticks o' dynamite. As it came out it passed close to one of the burros, and the animal hauled off an' gave it a kick. The explosion killed the burro, blew down the shack, an' the bird was sick fer a week. That wuz the last straw. Bill gave the ostriches to the zoo."



# Life on the Desert...

There was a time when it was common practice for traders on the reservations to cheat the Indian at every opportunity. But those days have passed, and today the business of Indian trading is governed by the same code of ethics that applies to honest trading everywhere. Joseph Schmedding spent 16 years on the Navajo reservation as a trader during the period of transition—when the charge-all-the-traffic-will-bear generation of traders was being supplanted by men who realized that fair dealing with the Indians was essential to their continued success. This story was one of the winners in Desert Magazine's 1951 Life-on-the-Desert contest.

By JOSEPH SCHMEDDING

**H**ALF A century ago, as one of the hired hands on the Triangle Bar Triangle ranch in Chaco Canyon, New Mexico, I learned my first lessons in the business of trading with Indians. My boss, Richard Wetherill, was rancher and stockman and in addition operated an Indian trading post. From time to time we cowhands would assist in the store. We also learned to trade for livestock brought by the Indians and bartered by them for food stuffs and other goods. In later years I had Indian trading posts of my own, first at Sanders, Arizona, and subsequently at Keams Canyon and Low Mountain, both in Arizona, situated in the heart of the Navajo Indian reservation.

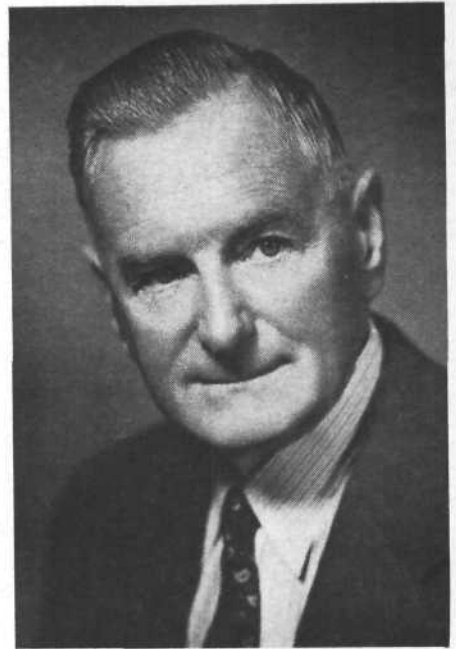
In all, I spent 16 years trading with the Navajo and Hopi Indians at a time when the term trading was synonymous with pioneer life.

In those days trading posts were few and scattered over a wide territory.

As yet there were no graded roads, culverts or bridges. Freightage was done with horse or mule-drawn wagons, generally by Indians, seldom by white men. Auto transportation was unknown and even if trucks had been in operation they would not have been able to travel over the ruts and trails which the Indians glorified by the name of roads.

When I first learned about trading, some oldtimers had already been doing that for 40 years. Those were the first-comers, men who had ventured into the trailless wilderness with pack outfits and later brought in their stocks of merchandise with ox-teams. I met several of them in widely separated locations and from them heard stories of the trading as it had been practiced by them. Some were squawmen, an accepted way of life in those early years in the Indian country.

At the turn of the century those old fellows looked upon the new men in



*Joe Schmedding, trader and author.*

the trading posts with amusement tinged with scorn. In their opinion the newcomers were not conforming to the "proper" style of handling the Indians' trade. Their own methods, orthodox through long usage, were far better. According to them, the green-horns were spoiling the natives and unfair competition for the men who had grown grey in the trading game.

The principal cause of their annoyance was the smaller margin of profit the new traders were making on the sale of goods, and the "unreasonably" high prices they were paying for the commodities the Indians brought to the posts.

*Picture taken in 1900 of the Wetherill ranch and trading post in Chaco Canyon, New Mexico. Photo by the author.*



"That man Johnston over at the lake is going to ruin us all," was the complaint of one of the old traders at whose post I stayed overnight. When I desired to know upon what he based his dire prediction, he exploded:

"Johnston sells sugar at two bits for two pounds!", adding that in all the years of his trading he had never sold the sweet stuff for less than 15 cents and, at times, for 20 cents a pound. Since this was in the days when sugar cost the traders less than five dollars a hundred, he was guilty by his own words of profiteering.

Knowing that I, too, was a trader, he asked me:

"What are you paying for pelts and goatskins?", and when I told him, he declared in a gruff voice: "Too much, way too much!"

In a showcase upon his counter I saw a single sewing needle stuck in a piece of black velvet. When he noticed that I was looking at the unusual display, he queried: "You selling needles?", to which I gave an affirmative answer.

"How much do you get for them?" he wanted to know. When I told him that in my post needles were sold at 10 cents for a package containing 20 of them, he shook his head, giving me a thoroughly disgusted and pitying look.

"No wonder we can't make any money in trading these days," was his vehement outburst. He then explained that he never sold needles by the package but only singly. And for one needle he made the Indian woman who wanted it give him in exchange a sheep pelt and a goatskin, worth between 75 cents and a dollar!

Astonished at such a fantastic transaction, I asked whether the Indians did not object to the high price. With a crafty look in his eyes he admitted that at the beginning there had been some who kicked and did not want to pay the price he demanded.

"I can still see some of them standing outside the counter, holding the needle in their hands, undecided whether or not to take it in exchange for the pelts," he chuckled gleefully, "so I simply took the needle away from them, pushed the pelts off the counter, and told them to go home and make one themselves!"

That had happened only a few times, in the early years of the trading, but soon the women gave up trying to get a better price for their pelts or a more reasonable figure on the needle.

"Nowadays you young fellows don't know how to trade and you are spoiling it for us oldtimers," he grumbled.

It is a well known and authenticated fact that many Indian traders had little conscience or, at least, gave no out-

ward sign of being endowed with one. They used to take advantage of the ignorance of the Indians when weighing wool and computing the value thereof. A trader might tell the Indian that he was buying wool at 50 cents a pound and then multiply the weight by 22. Thus the Indian, unacquainted with mathematics, was led to believe that he had received 50 cents a pound for his wool! In other instances, traders would falsify the weights. This also went unnoticed by the Indians who were unfamiliar with scales.

We also know of cases where Indians were plied with rum or whiskey to put them into the right attitude and proper condition for trading.

*Caveat emptor*—Let the buyer beware—would have been a most fitting motto over the doors of the old trading posts. Those days of the unregenerate practices are gone, gone forever one may be sure. Today and for some time past, the men who own and operate the posts on the various Indian reservations are on a par with respectable and honorable businessmen everywhere. They have formed an organization of Indian traders with a code of ethics that embodies all the fine points of straightforward dealings. Unfair methods and dishonest practices are outlawed. The traders generally are earnest in their efforts to do all that is possible to better the lot of the red man. They realize that fraud and deception and unfair actions are boomerangs that bring about their own downfall.

The trader of today is interested in bettering the economic condition of his Indian customers. Only if they prosper can he gain. He is deeply interested in seeing them secure the means to guarantee a decent living. Furthermore, he wants them to be healthy and for that reason is doing all he can to increase hospital and medical facilities. And he does not overlook the fact that the spiritual welfare is just as important as the material well-being.

Indian traders support the efforts and general activities of the various missions established in the Indian country. They work in close harmony with the missionaries, regardless of faith. An outstanding example is represented in the mission of the Franciscan Fathers at St. Michaels, Arizona, which has had the unceasing assistance of the traders in that section of the large Navajo Indian reservation. Incidentally, the Franciscan Fathers were the first to compile a workable phonetic dictionary of the Navajo language, printed a limited number of those books on hand-presses. Those dictionaries are now collectors' items, having long been out of print.

Traders are doing all that is possible

to encourage the native handicrafts, such as basket weaving, silversmithing, rug weaving, and similar arts. Much progress has been made to revive ancient methods, to recover the use of vegetable dyes, to again create the original patterns and designs which were becoming lost through non-use and machine production.

Thus, the disreputable practices of the old days have been discarded in favor of enlightened and more humane principles. Traders know that honesty, fairness and decent transactions pay dividends that exceed any illegal gains. In everyday life they observe the scriptural injunction: "And as you would that men should do to you, do you also to them in like manner," thereby making the world a better place in which to live for all of us.

### WELLTON, ARIZONA, IS NEWEST DESERT BOOM TOWN

One year ago you wouldn't think that Wellton, Arizona, would break all kinds of records in the next 10 years.

It has been a sleepy sort of desert town, typical stopping-off place for tourists hurrying to get to cooler country, and serving the sparse population about 60 miles east of Yuma.

The Wellton-Mohawk Project is changing all of that. Newest of the great irrigation projects under the Bureau of Reclamation, it received its first water May 1 during Reclamation's golden jubilee.

The bureau estimates that in the next 10 years between 30,000 and 50,000 new Arizonans will make their homes along the canals stretching to the Colorado River. And center of their activities will be Wellton. A new stretch of highway cut the town off the main highway a year ago, so Wellton is moving to the highway. Lots have been staked out, streets have been surveyed, property is selling fast, and new buildings are sprouting up.

The Wellton-Mohawk project itself is a division of the Gila Project. It envisions the development of 75,000 acres of land, beginning 15 miles east of Yuma and extending up the Gila River for about 40 miles.

Historically, the project follows the Indian-White Man cycle, for in 1500 the Pimas were farming along the Gila where the new development is taking place. Floods and drouth made the area untenable for the tribes but white men have attempted agriculture here since 1875.

Water for the project will be diverted from the river at Imperial Dam, 18 miles northeast of Yuma. It is taken from the Gila gravity main canal about 15 miles below the dam and then is carried by the Wellton and Mohawk canals, 21 and 43 miles long, respectively.—*Arizona Republic*.



# Letters

## Genuine Petrified Snake . . .

Roseburg, Oregon

Desert:

To me, the "rattlesnake" concretion illustrating "Puzzle Rocks of the Badlands" in *Desert's* March issue looks like a clam. Here in Oregon, when a clam sticks his neck out he is caught and stewed, but in California it seems he becomes petrified.

My cousin in eastern Oregon once came upon a true petrified rattlesnake. It had died coiled up on a rock. The perfect head was marked by two indentations where the eyes had been. It was about an inch thick and had three rattles. There was a small hole on one side, which led my cousin to believe he had died of a wound inflicted by some animal's bite. One could see two or three white ribs showing through.

MRS. CHARLES E. HILTON

## Pity the Mild Colorado . . .

Berkeley, California

Desert:

P. A. Birdick's letter in the April issue is perfect selling of Carolyn Curran's swimming ability.

But is it necessary to pick on the poor Colorado River and call it "treacherous" at Yuma or anywhere else?

Really . . . treacherous?

OTIS MARSTON

## Attitude Tempered by Years . . .

Long Beach, California

Desert:

In my opinion, "Between You and Me" in the April issue of *Desert*, in which were expressed thoughts on hunting, is the most significant page in that magazine.

I am nearly 60 years old. I did my share of hunting in my younger days, when guns were more commonly carried as an interim substitute for law and order. However, as I have grown older and have watched wildlife steadily diminish before the onrushing flood of modern man, my compassion for the defenseless inhabitants of forest and desert has dimmed my so-called "killer instinct." I am sure the young Los Angeles law student, whose letter you quoted, eventually will share this reaction.

I have heard the happy song of a small bird leave this life forever as my bullet disintegrated its tiny body — leaving nothing but a flutter of downy

feathers drifting away in the breeze. I have seen a large hawk close its eyelids in death as the three-foot span of its glistening body lay face up on its Mother Earth. His death, too, was my responsibility.

These are but two of the incidents of my younger days that brought about the tempering of my "killer instinct." My attitude now toward the denizens of forest and wasteland—excepting the rattlesnake—is one of cordial friendship and good will. It is my desire that they may understand my attitude and respond in kind.

Time was, during the early days of the West, when man could satiate his desire to kill by shooting, with impunity, the hostile Indian or, in many instances, one of his own kind. Men were few in the great expanse of the West, and danger of apprehension and punishment was practically nil.

However, now this "pastime" is fraught with great danger to the transgressor. This is realized by any sane man. Instead, the defenseless inhabitants with which God has populated the wastelands have become victims—not by necessity, but for pleasure.

A. E. WILKINSON

## Never Too Old . . .

Capistrano Beach, California

Desert:

In January I wrote a letter asking *Desert* please to clip away the field trip stories and maps before sending an issue to my roommate and me. "At my age, I cannot make the trips," I said.

But did *Desert* cooperate? I should say not! They just lined up a waiting list of rockhound friends to join our next excursion.

I find to my surprise that age has nothing to do with going on field trips and hunting rocks for hours at a time. It seems the more I go, the younger I feel.

BLANCHE BRADBURY

## Blowout Trail to Hauser . . .

Bellflower, California

Desert:

My husband and I have enjoyed *Desert Magazine* for many years, and we appreciate, as do many others, its editorial efforts to protect the natural beauty of the desert.

We have been all over the desert country collecting rocks, but in the past two years we have made at least two trips a month into the Wiley Well area. We always have been proud of the fact that most rockhounds try to keep clean camps, and many clubs clean and keep some of the more isolated areas.

The Wiley Well district was just such a place, and a delight to visit.

You can imagine our unbelief when we gazed one day on the markers left for a field trip to the Hauser beds—large wooden boxes of *broken glass!*

The road at its best is not a good one, but that day we had to drive over stretches where broken glass had been scattered over its surface. At first we thought someone had broken a water jug, and we hoped they were not out of water. Then, farther on, we found the ugly boxes of glass being used as markers.

What kind of people would do such a thing I have no idea. I can hardly believe a regular gem and mineral society could be responsible.

This area is visited by many, many clubs each year. The boxes of glass were placed next to signs reading, "O.C.M.L.S."

MARY FRANCES BERKHOLZ

## In Market for a Burro . . .

Orondo, Washington

Desert:

My husband and I are in the market for a burro, but we don't know where to get one. Perhaps some of your readers can help us.

For years we have been fond of these little "desert Solomons." Now that we live on a farm, we are able, for the first time, to care for one properly. Is there any place near Washington where we might buy one of these cunning pets?

MRS. W. L. DICKSON

## Appreciation, Not Worship . . .

F.P.O. San Francisco, California

Desert:

"We Explored the Valley of Thundering Water" in the April issue of *Desert* is very well written; and Author Betty Woods accurately tells the Navajo stories and legends. But she made one mistake: the Navajos do not worship rock formations.

I was born on the Navajo reservation and lived there all my life. In all the years, I never heard one Indian indicate any form of rock worship. They believe in a great spirit, God, and worship him, and they do show great appreciation for the natural wonders of our desert Southwest.

DE FOREST SMONSE

U.S.S. Washburn

## Trade Gun for Camera . . .

Rio Linda, California

Desert:

It occurred to me while reading the remarks regarding hunting in the April *Desert*, "Just Between You and Me," that this change of attitude toward taking life must come to many who have spent days, year after year, in the out-of-doors with a rifle.

Perhaps a great many of these ardent



## THE AMAZING PURPLE MOTOR OIL ROYAL TRITON !

Royal Triton—the amazing purple motor oil—was developed to give the greatest possible lubricant protection for today's precision-built cars.

Royal Triton got its distinctive purple color from the unique combination of fortifying compounds it contains. These compounds, combined with its high quality, make Royal Triton America's finest heavy-duty motor oil.



### HOW TO GET TOP PERFORMANCE FROM YOUR CAR

To get 100% performance you need follow just two simple rules: (1.) Take your car to your car dealer's for frequent checkups—at least every 2,000 miles. (2.) Use the finest motor oil money can buy—Royal Triton—45¢ per quart.

Available at leading car dealers' in most areas of the U.S.

### UNION OIL COMPANY OF CALIFORNIA

Los Angeles, Union Oil Bldg. • New York, 4904 RCA Bldg. • Chicago, 1612 Bankers Bldg. • New Orleans, 917 National Bank of Commerce Bldg. Cincinnati, 2111 Carew Tower Bldg.

hunters are in reality searching for and finding something quite different from what they believe they wish to experience. Undoubtedly a large percentage come home enriched far beyond any satisfaction in the taking of life. Years spent in part alone with Nature must in time bring sympathy which comes with familiarity and understanding which makes it pointless and unsatisfying to destroy so infinitely mysterious, so beautiful and vibrant a thing as life.

Even the sportsman's magazines show this tendency to reflect the real satisfaction found in these hunting expeditions — the closeness to Nature. Fewer of the photos show the lifeless trophy; more are of living animals and birds, evidently undisturbed, in their wilderness retreats. It seems safe to assume that a large proportion of those who habitually visit the last refuges of our wildlife succumb to this feeling of kinship with Nature's more unspoiled creatures. The thrill and the skill necessary to stalking with a camera is at least as great as that employed in stalking with a gun.

BESSIE BERG

• • •

### Puzzle Rocks of Canada . . .

Hamburg, Germany

Desert:

The "Puzzle Rocks of the Badlands" as pictured and described in Harold Weight's excellent article (March, '52 *Desert*) have remarkable counterparts in puzzle rocks found in the Eastern Township of the Province of Quebec, Canada. Canadian scientists and rock experts call the discovered puzzle rocks "concretions," but adequate explanations as to their bizarre forms and shapes are not forwarded. It is merely stated that they "seem to be composed of clay," and that the original soft matter presumably had been forced through cracks in the hard surface of the ground where it hardened, forming the unique shapes.

DR. OSCAR C. PFAUS

• • •

### Navajo Burial Pictured . . .

Sierra Madre, California

Desert:

In his fascinating story, "When White Hat Returned to the Land of the Witch Woman," Richard Van Valkenburgh states, "The Navajo do not permit photographs of a burial." (May *Desert*.)

The new book, *Navajo Means People*, includes a photographic sequence of just such a rite. The 11 pictures show a young Navajo couple burying their infant son.

Photographer Leonard McCombe took the pictures while living on the Navajo reservation.

AMANDA JAHNS



# Here and There—on the Desert

## ARIZONA

### Rhino Tells Geologists Story . . .

TUCSON—University of Arizona geologists found a baby rhinoceros, and a lost chapter from Southern Arizona's geological history—a period covering 57 million years—was partially restored. Last June Dr. John F. Lance and R. T. Chew discovered a fossil consisting of jaw fragments and teeth of an infant rhino on the east flank of the Rincon Mountains, about 45 miles east of Tucson. Formations in which the specimens were found form a dim picture of the growth of the Rincon-Catalina mountain chain and indicate the presence of a more lush Arizona climate, with lakes, heavy grass and tree growth and much higher humidity than the present arid climate provides.—*Arizona Republic*.

### Grazing Area Open to Game . . .

TUCSON—Game animals in Southern Arizona have gained the right to graze on public range in the Bureau of

Land Management's Grazing District No. 3. The grazing advisory board voted to set aside a certain number of animal units of grazing for game animals in the new 10-year permits up for renewal. All District 3 permittees have been advised their public range must not be posted against hunting or fishing.—*Arizona Republic*.

### Reclamation's Golden Jubilee . . .

YUMA—Arizona, where the oldest and newest power and agricultural developments are located, was host in April and May to the golden jubilee celebration of the Reclamation Act, signed by Teddy Roosevelt in 1902. The first major reclamation undertaking in the nation is the Salt River project surrounding Phoenix. Newest irrigation project—the Wellton-Mohawk system—was scheduled to receive its first water during the jubilee. Michael W. Straus, U. S. commissioner of reclamation, was chosen to open the 75,000-acre project May 1.—*Yuma Daily Sun*.

## Pictures of the Month . . . Contest

A picture without shadows is likely to be very flat—and that is the reason the camera fans like to come to the desert for photographs. There is more sunlight here—and it takes sunlight to make deep shadows. And that, also, is the reason Desert Magazine conducts a contest each month—to enable Desert's readers to have an opportunity to see the best of the photos taken by both amateur and professional photographers. Entries in these Picture-of-the-Month contests may include any subject which is essentially of the desert—landscapes, dunes, flowers, canyons, people, wildlife, ghost towns, rock formations, sunsets, human interest—the subjects are almost unlimited. Contestants are urged to keep away from commonplace subjects such as Joshua trees and Saguaro cactus. Unusual pictures are preferred by the judges.

Entries for the June contest must be in the Desert Magazine office, Palm Desert, California, by June 20, and the winning prints will appear in the August issue. Pictures which arrive too late for one contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

### HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

*The Desert Magazine*

PALM DESERT, CALIFORNIA

## Take A Vacation In California-Land Vintage 1852

Just send ONE DOLLAR for the amazing Ghost Town 4-in-1 Package INCLUDING

1. **Sunshine Empire Map.** 22 x 34 inches, 66 wonders in color.
2. **Knott's Berry Farm, Ghost Town Souvenir.** Rare drawings, colored pictures, and old timer's tale of this fabulous institution.
3. **36 page Ghost Town Annual.** Original stories and factual articles by famous writers. Great Western pictures and sketches including Klondike with the exciting tale of a sensational stampede. A collector's item.
4. **Souvenir Ticket of Ghost Town & Calico RR.** now in actual operation. It's 16 inches long and certain to give you many a chuckle—pending the time you can travel in one of the parlor cars behind the old engine built 75 years ago. Send \$1 or check for each 4-in-One Package

N. F. WILSON

Box 115 Ghost Town, California

## FOR Coachella Valley Ranches and Acreage SEE

**RICHARD O.  
"Dick" DAVIS**  
HOTEL INDIO BLDG-SUITE 126  
Phone **7-3302**

INDIO, CALIFORNIA

## This Month's Special . . .

**RUBY RED BLUSH GRAPEFRUIT**  
25 acres (young)

**THOMPSON SEEDLESS GRAPES**  
30 acres (full bearing)

**WHITE MARSH GRAPEFRUIT**  
3 acres (full bearing)

Fine 4 bedroom home, new foreman's house, new equipment shed.

Total acreage 60 acres near Indio, finest soil and nice warm area, here is a real ranch, money has been no object to bring this ranch to perfect condition.

Full price \$135,000. TERMS.

Exclusive Listing!

# THE DESERT TRADING POST

Classified Advertising in This Section Costs 8c a Word, \$1.00 Minimum Per Issue

## INDIAN GOODS

WE SEARCH UNCEASINGLY for old and rare Indian Artifacts, but seldom accumulate a large assortment. Collectors seem as eager to possess them as their original owners. To those who like real Indian things, a hearty welcome. You too may find here something you have long desired. We are continually increasing our stock with the finest in Navajo rugs, Indian baskets, and hand-made jewelry. Daniels Trading Post, 401 W. Foothill Blvd., Fontana, California.

FOUR PERFECT AND FINE Indian Arrowheads \$1.00. 2 large arrowheads \$1.00; extra fine stone tomahawk \$2.00; 4 beautiful bird arrowheads \$1.00; 2 flint knives \$1.00; fine effigy peace pipe \$8.00; bone fish hook \$2.00; 6" or over spearhead \$5.00, thin and perfect. List Free. Lear's, Glenwood, Arkansas.

THE STONE POINT: A comprehensive, illustrated booklet on the Indian Arrowhead. Includes process of manufacture, types and purposes. Interesting. Educational. 50c. Adrian Atwater, 602 West Third Street, Carson City, Nevada.

FOR SALE: Antique Indian collection. Many ollas, metates, baskets, artifacts, etc. Box 180, Julian, California.

## BOOKS — MAGAZINES

BOOKS FOUND: Any subject, any author. Fast service. Send wants—no obligation. International Bookfinders. Box 3003-D, Beverly Hills, California.

BLACK SAND! by the author of "The Torch of Reason," "His Polar Banshee Dream"—won a letter from a reigning King—"Two Little Shoes and Two Little Feet"—instrumental in reelecting a Governor—"Too Old," "When Your Hair Is Like the Snow," "The Strike of the Mothers of Men" and so on. Do you want to die never having lived? No! Then send \$2.50 for "Black Sand," (Autographed copy) to Frederick Forrest Berry, Alaska Gardens, Meredith, N. H.

## REAL ESTATE

WILL SELL 5-acre patented Jackrabbit Homestead 15 miles from Palm Springs, 4 miles from Palm Desert, 2 miles from Palms-to-Pines Highway in Section 36. Elevation about 1000 feet. Has good 22-foot house trailer on cement block foundation. Two double beds. On hillside overlooking lower Cat canyon. No electricity, necessary to haul water. \$1600 terms. Discount for cash. Address Owner, Box HR, c/o Desert Magazine, Palm Desert, California.

LARGE BUILDING LOTS for winter homes. Close to highway 60-70. Excellent soft water available. L. C. Hockett, Box 276, Salome, Arizona.

FOR SALE: New two story house, complete Lapidary Shop, ten lots, shade, water. Reasonable. Box 555, Goldfield, Nevada.

DESERT ESTATES—10 acres only \$750. The same land—40 acres only \$2,000. Nice desert land located 13 miles Northeast of Palm Springs. A good speculation, and a good investment. R. H. McDonald, Cor. Dillon & Palm Dr., Box 21, Desert Hot Springs — Phone 143.

CAMP WILLIAMS — Approximately 12 acres. Beautiful trees; log slab buildings 3 years old; restrooms, sleeping quarters; trout stream and camp grounds; beer and cafe licenses; plenty room for trailer park and cabins; privately owned land in forest reserve; elevation approximately 1600 ft.; 15 miles from Azusa, California, in East Fork, San Gabriel Canyon. \$24,000. Terms. \$12,500 down. M. Contreras, 1854 N. Raymond, Pasadena, Calif.

TWO BEAUTIFUL lots; approximately 300 ft. frontage Kuffel Canyon Road, Sky Forest, California, near Arrowhead and Rim of World Highway. Can be divided into 4 or 5 lots. Water shares. \$4500. M. Contreras, 1854 N. Raymond, Pasadena, California.

## BUSINESS OPPORTUNITIES

FABULOUS EARNINGS — Fascinating pastime. Growing Genuine, living miniature (Ming) Trees. New Sensational Business or Hobby. Astounding information FREE. Dwarf Gardens, Box 355N, Briggs Station, Los Angeles 48, California.

## MISCELLANEOUS

LEATHERCRAFT SUPPLIES: Make your own bags, wallets, belts, etc. Free instructions at store. Mail orders promptly filled. Bill White's, 102 W. State St., Redlands, California.

DESERT TEA. One pound one dollar postpaid. Greasewood Greenhouses, Lenwood, Barstow, California.

SILVERY DESERT HOLLY PLANTS: One dollar each postpaid. Greasewood Greenhouses, Lenwood, Barstow, California.

PROSPECTORS AND ROCKHOUNDS WANTED. To join the newly incorporated United Prospectors Organization. If you are experienced or beginners the articles in our magazine are bound to help you enjoy your hobby and the outdoors. Send your name for our new brochure and literature. United Prospectors, Box 729, Lodi, California.

FIND YOUR OWN beautiful Gold nuggets! It's fun! Beginners illustrated instruction book \$1.00. Gold pan, \$2.00. Where to go? Gold placer maps, Southern California, Nevada, Arizona, \$1.00 each state. All three maps \$2.00. Desert Jim, Box 604 Stockton, Calif.

PANNING GOLD — Another hobby for Rock Hounds and Desert Roamers. A new booklet, "What the Beginner Needs to Know," 36 pages of instructions; also catalogue of mining books and prospectors' supplies, maps of where to go and blue prints of hand machines you can build. Mailed postpaid 25c, coin or stamps. Old Prospector, Box 729, Desk 5, Lodi, Calif.

LADY GODIVA "The World's Finest Beautifier." For women who wish to become beautiful, for women who wish to remain beautiful. An outstanding desert cream. For information, write or call Lola Barnes, 963 N. Oakland, Pasadena 6, Calif. or phone SYcamore 4-2378.

LARGE WESTERN COLLECTION For Sale: Hearses, cabs, buggies, carriages, surreys, huge logging wheels. All kinds large and small music boxes. Thousands of items and historical relics, pictures, documents. A complete museum collected over many years. Largest of its kind in the west. Owners can no longer care for it. Will make a fortune in right spot or in connection with some other tourist or highway business. Price \$20,000. Write Box FG, Desert Magazine.

SAVE 50% On New Binoculars! Free catalog. Free book, "How to Select Binoculars." Write today! Bushnell's 43-D36, 43 E. Green Street, Pasadena 1, California.

SILVERSMITH AND ARTIST wants location for salesroom. Curios etc. Widower with trailer and equipment. Address Box B Desert Magazine, Palm Desert, California.

GOLD MINE near Riverside California. Have \$3222 in it. What am I offered? Or will trade for lot or late model car or what. B. C. Dawson, 13353 Gager St. Pacoima, California.

NATIVE HUT, Novelty Lamp. Hut designed parchment shade. When lighted, shows native dancer and drummer silhouette. Raft type base, 5"x5"x2". Lamp 11" high, \$5.95 postpaid. Television style, 12", \$7.95 postpaid. Send 10c in coin for snapshot, credited on order. Lynn Lamp Shop, Route 1, Box 128A, Yuma, Arizona.

PHOTOGRAPHIC GEMS made from your own favorite negatives. 5x7 inch enlargements sealed in glass-clear plastic and mounted in handsome display mounts, 75c each, three for \$2.00. W. C. Minor, Box 62, Fruita, Colorado.

## Oil Line Assured . . .

FLORENCE—The Department of the Interior has granted permission for construction of a \$75,000,000 pipeline across Arizona from West Texas and New Mexico to oil fields in California. West Coast Pipe Line Company of Dallas, Texas, plans to erect an oil refinery at Florence which would process 15,000 barrels of crude oil a day for Arizona consumers. — *San Pedro Valley News*.

## Slashes Driving Time . . .

WICKENBURG—Driving time between Phoenix and Kingman will be cut almost in half by U. S. 93, a secondary highway route extending from 16 miles north of Wickenburg northwest to Kingman. Cy Perkins, state highway engineer, said it will trim 100 miles from the Phoenix-Kingman distance, taken now over U. S. 89 to Ashfork, then west on U. S. 66. The alternate route was scheduled to open in May. — *Wickenburg Sun*.

## For Indian Research . . .

TUCSON—To meet a demand for greater knowledge of modern Indian groups and Indian problems, an educational and fact-finding bureau of ethnic research has been set up by the board of regents of the University and State Colleges of Arizona. The bureau will be operated in the university's department of anthropology. Studies will be confined to what the Indians do and have, and not what they should do or should have, explained Dr. Emil W. Haury, head of the department. Results will be in the form of technical and specialized information available to state or local agencies, or to any group interested in or responsible for policies affecting Indian tribes. — *Arizona Republic*.

## Erect Road Markers . . .

FLAGSTAFF—Grand Falls on the Little Colorado River, a rare scenic attraction particularly when the river is in flood, in the past has been accessible only to the initiated. The road to it lacked proper markers. Now Frederick R. Brueck, superintendent of Wupatki National Monument, has installed two signs at forks in the road, and promises others will be erected soon. — *Coconino Sun*.

## Predict High Run-off . . .

PHOENIX—Additional run-off of 570,000 acre-feet of water from snow-melt in the major watershed areas was expected to bring storage reservoirs of both the Salt and San Carlos projects to 1,900,000 acre-feet. Predicted gain would give Salt River project reservoirs 1,700,000 acre-feet, only 376,000 below overflow capacity and the greatest volume since 1942. — *Arizona Republic*.



## Game Surveys Completed . . .

**GRAND CANYON**—"Knowledge of deer populations and trends is essential to proper deer range management," explained J. J. Baldwin, district forest ranger for Kaibab National Forest when he released figures obtained in the April range survey. "Through a study of condition and trend of the herd and a study of available forage, it is possible to estimate and recommend the number that should be removed annually in hunting." The survey will be evaluated by the Arizona Game Commission before hunt proposals are made. — *Kane County Standard*.

**FLAGSTAFF**—There will be no charge this year for the use of camping and picnic sites in the forest service areas of Oak Creek Canyon, Coconino National Forest officials have announced. Maintenance services will be continued despite the dropping of the fee plan, but all users are urged to cooperate with the forest service in keeping the area as clean as possible. — *Coconino Sun*.

**HOLBROOK**—Beginning April 14, gates at Petrified Forest National Monument near Holbrook were opened at 7 a.m. and closed at 6 p.m., increasing to 11 hours the daily operating time. Since the distance between gates is 14 miles, Superintendent William E. Branch reminded visitors, cars will not be permitted to pass through the monument after 5:30 p.m.

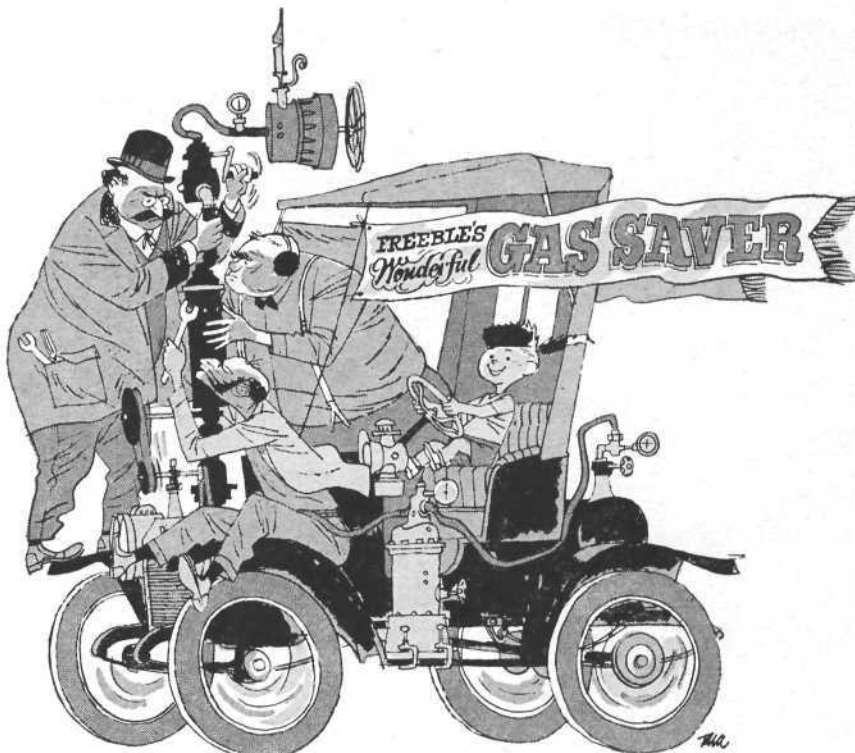
## CALIFORNIA

### Start Park Work Soon . . .

**INDIO**—Soon after Governor Warren's 1952-53 budget becomes effective July 1, work will begin on the new Salton Sea State Park, announced Newton Drury, chief of the State Division of Beaches and Parks. Funds contained in the budget totaled \$123,700 as a start toward development of the park. — *Indio News*.

### Traffic Tabulated . . .

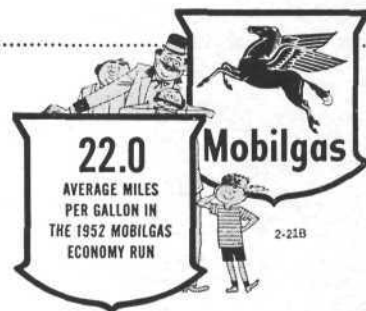
**YERMO**—According to figures released by the California Bureau of Plant Quarantine for the month of March, more vehicles and passengers entered California through Yermo than through any other of the state's border quarantine stations. Counted at Yermo were 30,061 automobiles, 3005 trucks and 80,270 passengers. Other portals of entry registered as follows: Fort Yuma—25,573 cars, 4876 trucks, 72,545 passengers; Blythe—25,242 cars, 4709 trucks, 70,633 passengers; Daggett—13,025 cars, 641 trucks, 36,572 passengers; Parker — 8901 cars, 606 trucks, 23,743 passengers.



"WE GET WONDERFUL MILEAGE — BUT IT TAKES 3 MEN TO OPERATE IT"

THERE'S AN EASY WAY—

Get all the mileage  
your car can deliver...  
get Mobilgas!



**PROOF THAT YOU GET REAL ECONOMY FROM MOBILGAS**

**WAS DEMONSTRATED IN THE MOBILGAS ECONOMY RUN.**

**FROM LOS ANGELES TO SUN VALLEY, 25 AMERICAN CARS, CERTIFIED STRICTLY STOCK BY (AAA), COMPLETED THE 1415.4-MILE RUN THROUGH CITIES, ACROSS THE DESERT AND OVER MOUNTAINS AT AN AVERAGE OF 22.0 MILES-PER-GALLON.**

**DRIVERS USED EITHER MOBILGAS OR MOBILGAS SPECIAL.**

**YOU CAN GET ALL THE MILEAGE YOUR CAR CAN DELIVER— JUST KEEP IT IN TOP CONDITION, DRIVE SANELY, AND — USE MOBILGAS.**

GENERAL PETROLEUM CORPORATION,  
converting nature's gift for better living.

## New Customs Regulations . . .

CALEXICO—New customs regulations covering goods exported to Mexico have been announced by Elias Colunga, Consul of Mexico at Calexico. Under the terms of a new customs code effective April 1, all shipments valued at more than 1000 pesos (\$115.60 U. S. currency) must be covered by a commercial invoice, properly certified by the Mexican Consulate. Excepted from the regulation are most shipments to free zones in the Northern and Southern territories of Lower California.—*Calexico Chronicle*.

## Resume Labor Recruitment . . .

INDIO — With domestic labor in shortest supply ever known, Coachella Valley ranchers rejoiced to learn the proposal to shut down on recruitment of Mexican National farm laborers

until May 11 has been cancelled. The Valley's vegetable harvest will require at least another 1000 workers during June.—*Coachella Valley Sun*.

## Indian Barbecue Okayed . . .

BLYTHER—Unanimous approval by the Palo Verde Valley chamber of commerce assured Indians from the Colorado River reservation of another free barbecue this fall. Plans are to make it an annual event, inviting Indians to participate with presentations of their tribal dances. The first venture was last October when the chamber financed, prepared and served a beef barbecue to about 800 Indian guests.—*Palo Verde Valley Times*.

## Museum Plans New Home . . .

PALM SPRINGS — During the seven months it operated between February 1951 and February 1952, the

Palm Springs Desert Museum served more than 43,000 persons. With a full schedule of activities and such enthusiastic participation by residents and visitors, the museum has long since outgrown its present quarters. Directors now are making plans for a new, modern building to house the institution. According to Board President Winfield H. Line, the museum has \$22,000 on hand, and directors have pledged an additional \$25,000 for construction roughly estimated at \$100,000. Land was donated by Miss Cornelia White, Palm Springs pioneer.—*Desert Sun*.

## 200 Jeeps in Cavalcade . . .

BORREGO SPRINGS—Two hundred jeeps and power wagons, carrying at least three times that number of modern pioneers, blazed the 63 miles from Hemet to Borrego Springs April 5 in the fourth annual De Anza Jeep Cavalcade. The jeeps followed the dusty trail leading from Hemet to Terwilliger Valley, dropping down Turkey Foot Grade into Coyote Canyon and on to Borrego. It was the largest motorcade in the event's history.—*Hemet News*.

## NEVADA

### Urban Population Jumps . . .

LAS VEGAS—Nevada's urban population grew 94.2 percent in the decade between 1940 and 1950, census bureau summaries show. Of the state's 160,083 people in 1950, 91,625 were urban, 54,997 were rural non-farm and 13,461 were rural farm. The rural non-farm population increased 21.8 percent, and rural farm declined 13.8 percent. Males outnumbered females by nearly 10,000.—*Las Vegas Review-Journal*.

### Flood Dangers Lessen . . .

RENO—Nevada areas, buried under a 50-year record snowfall this winter, breathed easier in April as threats of heavy floods were being dissipated. The city of Reno was believed safe from major disaster, although some lower lying areas might be inundated by a late spring run-off. In Ely, good weather and a steady disappearance of snow have created optimism; and in the Humboldt River valley in eastern Nevada, army engineers reported that there appears to be no immediate danger of floods.—*Las Vegas Review-Journal*.

## TRUE OR FALSE

There's no teacher to grade your answers—and no one but you will know how many misses in your score. And do not be discouraged by a low score, for the writer who made up this list spent 40 years learning the answers. A tenderfoot may not answer more than 10 or 12 correctly; 14 to 16 is a good score; 17 or 18 is excellent. Over 18 is super. The answers are on page 35.

- 1—The sidewinder derives its name from the manner in which it strikes. True . . . False . . .
- 2—Joshua trees grow as far north as Las Vegas, Nevada. True . . . False . . .
- 3—Papago women climb the Saguaro cacti to gather ripe fruit. True . . . False . . .
- 4—A coyote is strictly a vegetarian. True . . . False . . .
- 5—Shipaulovi is the name of a Hopi town in Arizona. True . . . False . . .
- 6—The historic battle between the Earps and the Clanton gang was fought at Tombstone, Arizona. True . . . False . . .
- 7—Mineral produced in the mines in Bingham Canyon, Utah, is mainly gold. True . . . False . . .
- 8—Gold is never found in quartz. True . . . False . . .
- 9—Mexican Hat, Utah, derives its name from an unusual rock formation. True . . . False . . .
- 10—On his historic trek at the head of California's first white colonists, Juan Bautista de Anza crossed the Colorado river at Yuma. True . . . False . . .
- 11—Cedar Brakes National Monument is in California. True . . . False . . .
- 12—North rim of Grand Canyon is not as high as the South Rim. True . . . False . . .
- 13—Among the Navajos, the weaving is done almost entirely by the men. True . . . False . . .
- 14—The blossom of the Indigo bush is yellow. True . . . False . . .
- 15—Flagstaff, Arizona, is on U. S. Highway 66. True . . . False . . .
- 16—The Indian craftsmen of San Ildefonso in New Mexico are best known for their pottery making. True . . . False . . .
- 17—Visitors to Monument Valley in southern Utah often see wild buffalo roaming at large. True . . . False . . .
- 18—The book *The Winning of Barbara Worth* was written by Harold Bell Wright. True . . . False . . .
- 19—The date palm tree is not a native of North America. True . . . False . . .
- 20—The Navajos are the largest Indian tribe in United States. True . . . False . . .

Rest and play in  
**THE VALLEY OF ENCHANTMENT**  
 Write direct to any of the Four Guest Ranches for information.  
 Illustrated folders  
**Address: Lucerne Valley, California**  
**SKY-HI C BAR H DOUBLE J EL SUENO MUFFIN MOUNTAIN MOTEL**



## Atomic Bombs and Weather . . .

WASHINGTON—Atomic officials have disclaimed responsibility for Nevada's bad winter, and weather experts have backed them up. "The atomic bomb, mean as it is, just can't be blamed for all that snow," they said. The disclaimers were prompted by a petition sent to Governor Charles Russell by residents of the mining town of Golconda, Nevada. The petitioners blamed last year's atomic tests at Las Vegas for the worst winter weather Nevada has had in 60 years.

Atomic officials have been getting similar protests ever since the war. Weather experts were assigned to Bikini A-bomb tests in 1946, and to all tests since, and their conclusion is that atomic explosions have absolutely no general effect on the weather. "People overestimate the potency of man's most terrible weapon," said one official, "and underestimate the power of Nature."—*Yuma Daily Sun*.

## Colorado's Muddy, Too . . .

BOULDER CITY—The Missouri isn't the only river that's muddy during flood time, report officials at Hoover Dam. U. S. Geological survey instruments at Lee's Ferry recorded a total of 1,710,000 tons of sediment passing that point in the waters of the Colorado during the month of March. It is calculated it would require 31,091 railway coal cars to haul that much mud away.—*Las Vegas Review-Journal*.

## Work on Missing Link . . .

TONOPAH—U. S. Highway 6 will stretch without interruption from Provincetown, Massachusetts, to Long Beach, California, when the 25½-mile "missing link" is completed in August. With the paving of this section of roadway, C. C. Boak, Tonopah resident and a national director of the Highway 6 organization, expects a greatly increased flow of traffic to be channeled into Tonopah, Goldfield and Beatty. "It is the shortest as well as the most scenic all-year route across the United States," he said.—*Tonopah Times-Bonanza*.

## More Water in Nevada . . .

RENO — Reporting on its annual spring snow surveys, the Nevada Co-operative Snow Surveys Committee forecasted water run-off this spring and summer will be above normal on

all streams and rivers in the state. In general, the committee noted in April, high elevation snow throughout the state is about twice normal while low elevation snow varies from three to four times normal depth.—*Las Vegas Review-Journal*.

## Lake Level Starts Up . . .

BOULDER CITY — Having sunk to its lowest point since it was first filled, 1133.27 feet above sea level, Lake Mead has started to rise again, reports Carl P. Vettors, chief, office of river control, Bureau of Reclamation. The lake has been kept fairly low for the last few years by heavy use for power and irrigation, while fair winters failed to produce heavy run-offs. After a wet autumn and extremely heavy winter snows this year, it is expected to reach a maximum height—about 1220 feet elevation—some time late in July.—*Las Vegas Review-Journal*.

## NEW MEXICO

### Congress Criticized for Cut . . .

GALLUP—"Looks as though the Navajo-Hopi long-range program has been forgotten," Sam Ahkeah, chairman of the Navajo tribal council told tribesmen from New Mexico, Arizona, Colorado and Utah at a meeting to discuss the recent cut in appropriations.



1000 TRAVEL SCENES  
**COLOR SLIDES**  
FOR YOUR  
VACATION RECORD  
FREE LIST  
SAMPLES 30¢ WRITE TODAY  
**KELLY D. CHODA**  
BOX 5 LOS ALAMOS, NEW MEX.

The Indian Bureau had asked for \$20,-394,200, and the House slashed the figure to \$2,500,000. A resolution passed by the council provides for three delegates to appear before the Senate appropriations committee to ask restoration of the \$18,000,000 cut.—*Arizona Republic*.

## Plan Atomic Monument . . .

ALAMOGORDO — Nearly eight years ago, on a sandy patch of desert near Alamogordo, man for the first time loosed some of the violence packed in the atom's heart. Now gov-



**RAINBOW BRIDGE**

**Spectacular  
Rainbow Bridge**

Take the thrilling ride on horseback into the scenic desert wilderness of southern Utah — to America's greatest natural bridge. Comfortable lodging. Good food.

For rates and information write to  
**RAINBOW LODGE, TONALEA, ARIZONA**



**World's Greatest  
BINOCULAR**  
See BUSHNELL'S 33 Models  
NEW FREE CATALOG! **\$14.95 UP**

**SAVE 50% And More**

**30 Day FREE Trial**

Guaranteed to give you more and save you money on every popular model. Don't overpay! Compare BUSHNELL'S before you buy. Send for FREE CATALOG and **Free Book "How To Select Binoculars"**

**BUSHNELL Binoculars** Dept. D46 Bushnell Building Pasadena 1, Calif.

ASK YOUR CONTRACTOR ABOUT "PRECISION BUILT"

## RED CINDER BLOCKS



**Homes of Distinction**  
are built with

You'll have year  
around comfort  
with  
"Precision Built"  
RED CINDER OR  
PUMICE BLOCKS

More  
House  
For  
Your  
Money



PLANS AVAILABLE  
DESERT CINDER BLOCKS FOR  
DESERT HOMES

**TRANSIT MIXED CONCRETE CO.**  
3464 E. Foothill Blvd., Pasadena 8  
RYAN 1-6329 or Corona Phone 1340

## PEACE AND SECURITY

20 acres virgin land, 6 mi. N.W. of Adelanto. Ideal for poultry, hideaway. \$670.00 (Full Price) \$20.00 down, \$12.00 per mo. buys it. Act now!

**PON & CO.**

Box 546

Azusa, California

ernment officials are planning a national monument at the scene of the first A-bomb explosion. Eventually a museum will be built on the site to house a replica of the first bomb and the instruments used in the first test. —*Las Vegas Review-Journal*.

#### Uncovers Ancient Dwellings . . .

WHITE SANDS—While working on new road construction at White Sands Proving Ground, F. W. Thompson, heavy equipment operator, uncovered evidences of an early Indian settlement. Foundations of 15 primi-

tive dwellings were unearthed, and a well-preserved skeleton, measuring almost seven feet in length, was found buried beneath the mud slab floor of one of the rectangular huts. —*Las Cruces Citizen*.

#### Indians on the Force . . .

GALLUP—"The problem is that many of our people do not understand English and can't make themselves understood when they get into trouble," said a Navajo Indian advocating hiring one or more Navajos as policemen in larger communities bordering the reservation. The worst condition the tribal council's law enforcement committee has found so far is in the town of Gallup, reported Adolph Maloney, committee member from Tuba City. He said the Gallup city council has been approached and that his committee had suggested at least three good Navajos be placed on the police force there to protect and aid the Navajos. —*Coconino Sun*.

#### New Project Progresses . . .

ALAMOGORDO — Highway 54 through New Mexico lacks just 34 miles for pavement all the way from Dalhart to El Paso. Seventeen miles of roadway north from Carrizozo were scheduled to be let to contract in May, and another 17 miles, to close the unpaved gap, will be let by the first of 1953. —*Alamogordo News*.

#### Increase Water Allotment . . .

LAS CRUCES — An increase in water allotment for Rio Grande Valley users was announced in April, but spring inflow to that date was disappointing. "Total project storage April 7 was 84,200 acre-feet of which 15,000 acre-feet is under Federal Court injunction," announced L. R. Fiock, manager of the Bureau of Reclamation's Rio Grande project. "Storage the same day in 1951 was 376,000 acre-feet, while average storage for this period of the year is 1,100,000 acre-feet." —*Las Cruces Citizen*.

#### Science Vs. the Primitive . . .

GALLUP—Lynn Hatch, acting area forestry director, was up against the eternal misunderstanding between the scientist and the primitive belief in the supernatural when he suggested to Navajo Indians that they reduce their flocks. "Scientific surveys," reported Hatch, "show a large part of the reservation has been damaged by the drouth years of 1950 and 1951." The government is recommending that the Navajo Tribal Council vote new regulations which would temporarily reduce non-productive livestock loads in critical areas. The Navajos believe "the grass will grow better where it is grazed more." —*Arizona Republic*.

**BIG COMFORT SMALL PRICE**



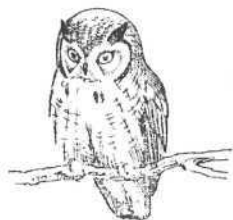
SEND FOR CATALOG ON SLEEPING BAGS

**GUARANTEED POSTPAID \$7.245**

**WORLD'S FINEST SLEEPING BAG**  
2 QUILTS of 100% NEW DOWN—removable.  
8 oz. ARMY POPLIN COVER—ARMY BALLOON CLOTH SHEET. USE 1 QUILT IN MILD-WEATHER, 2 QUILTS IN COLD-WEATHER.  
**WRITE FOR FREE FOLDER—CORRECT INFORMATION ON HOW TO SELECT YOUR SLEEPING BAG. BAGS FROM \$8.95 up.**

**BRADLEY-REHRIG**  
WEST'S LARGEST IN CAMPING GOODS SALES  
MAIN OFFICE: 99 E. COLORADO PASADENA 1, CALIF.  
SAN BERNARDINO 447 THIRD  
SANTA ANA 406 W. FOURTH  
FRESNO 115 VAN NESS  
RIVERSIDE 4023 MAIN

## WHO WANTS A NATURE HOBBY?



*Let Audubon Magazine Be  
Your Outdoor Guide . .*



It's America's most fascinating wildlife publication. Issued six times a year by the National Audubon Society—68 pages in every number bringing to you in your easy chair dozens of appealing photographs and articles by famous naturalists.

On the right is a group of bird watchers in the Santa Catalina mountains. Why not learn more about healthful nature hobbies right now? Subscribe to Audubon Magazine today. If you do so without delay, we'll send you 24 of the famous full-color Audubon Stamps absolutely free. Send three dollars for one year's issues to

*Audubon Magazine*

1000 Fifth Avenue — Dept. D — New York 28, N. Y.





## UTAH

### Survey Crews Return . . .

SALT LAKE CITY—Heading for the wild country of southeast Utah, survey crews of the U. S. Bureau of Land Management left Salt Lake City in April to resume surveys of public lands which have been in progress for nearly a century. Two crews of 10 to 12 men will continue work of accurately establishing section boundaries, contours and other particulars needed for mapping the area. These surveys have been in progress since 1855, but approximately one-fifth of Utah's 54,000,000 acres still is uncharted.—*Salt Lake Tribune*.

### Wetter Years Ahead . . .

SALT LAKE CITY—Natural and artificial lakes in the Great Basin and vicinity will reach maximum levels by 1960, according to the predictions of one of the world's best-known meteorologists. Dr. H. C. Willett, head of the department of meteorology at Massachusetts Institute of Technology, foresees annual increase in rainfall to a maximum in about eight years and a significant drop in temperature "probably reaching the first minimum level by 1960-65." The scientist's expectations are based on a correlation of sun-spot activity and the earth's weather.—*Arizona Republic*.

### Buses Replace Covered Wagons . . .

SALT LAKE CITY—Sleek buses will transport members of the Sons of Utah Pioneers over old Donner and Oregon trails on the group's pioneer trek July 4 to 14. Statues and replicas depicting pioneer scenes will be given to the governors of California, Oregon, Washington and Idaho. Trip complement will be limited to 300, announced Fred E. H. Curtis, trek co-chairman.—*Salt Lake Tribune*.

### TRUE OR FALSE ANSWERS

Questions are on page 32

- 1—False. The name describes its manner of locomotion.
- 2—True.
- 3—False. The fruit is knocked down with long poles.
- 4—False. The coyote is a meat-eater.
- 5—True. 6—True.
- 7—False. Bingham Canyon mines produce mostly copper.
- 8—False. Gold commonly occurs in quartz.
- 9—True. 10—True.
- 11—False. Cedar Brakes National Monument is in Utah.
- 12—False. The North Rim is higher.
- 13—False. The women do most of the weaving.
- 14—False. Blossom of the Indigo bush is indigo.
- 15—True.
- 17—False. There are no buffalo in Monument Valley.
- 18—True. 19—True. 20—True.

### Salute American Indian . . .

PROVO—As a tribute to American Indians, Brigham Young University students have organized "The Tribe of Many Feathers." Members are Indians and students interested in Indian affairs. Carl Vincenti, a full-blooded Apache, is chief.—*Yuma Daily Sun*.

### Indians' Memory Good . . .

WASHINGTON—Memory of the livestock reduction program on their reservation in the '30s still rankles in the minds of the Navajos, Norman M. Littell, attorney for the Navajos, told a house judiciary subcommittee. During that period, he reminded the group, Indians were arrested without warrant, their homes were invaded and many Navajos were injured as the government carried out its plan to reduce their herds by about one half. At the request of the Navajo Council, Littell opposed a bill which would give special law enforcement officers of the Indian Bureau permission to make arrests without warrants.—*Arizona Republic*.

ALTA — George Watson, the "mayor" of Alta, was found dead March 31 in his picturesque mountain cabin. It was Watson who sparked the movement to develop Alta into a winter-summer recreation area by donating a large parcel of land to the government in the late 1930s.—*Salt Lake Tribune*.

### Record Snowfall Near Vernal . . .

VERNAL—Highest recorded snowfall and water content in more than 20 years of measurements was obtained in late March by Ashley Forest Supervisor William D. Hurst on the King's Cabin snow course north of Vernal. The course showed snow depth of 56.1 inches, 170 percent of average,

with a water content of 17.3 inches, 182 percent of the norm. — *Vernal Express*.

### McNICKLE TO HEAD NEW INDIAN AID PROJECT

Commissioner of Indian Affairs Dillon S. Myer has announced D'Arcy McNickle, former chief of the Indian Bureau's Tribal Relations Branch and more recently a member of the Bureau's program division, will head a program to initiate cooperative and self-help methods among Indians. The project is sponsored by the Field Foundation in conjunction with the National Congress of American Indians.

### "EVERYTHING FOR THE HIKER"

SLEEPING BAGS  
AIR MATTRESSES  
SMALL TENTS

and many other items

### VAN DEGRIFT'S HIKE HUT

717 West Seventh Street  
LOS ANGELES 14, CALIFORNIA

### HOTEL

*Clark*

A splendid location in the heart of Downtown Los Angeles. 555 delightful rooms, all with all modern hotel facilities. \$3.50

Outstanding Food —  
Ye Old Oak Tavern;  
also popular Sub-Marine  
Cocktail Lounge . . .  
Garage Adjoining.

5 minutes from Union  
R.R. Terminal



DOWNTOWN  
AT PERSHING SQUARE

*Los Angeles*  
426 S. HILL STREET

JOHN T. LOCHHEAD — M. E. MALTBY —  
MANAGING OWNERS

SPECIAL RATES TO SERVICEMEN

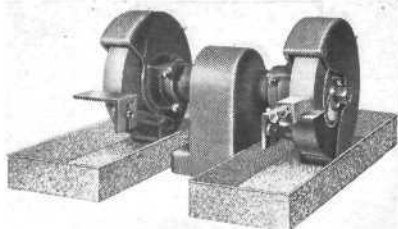
### Keep Your Back Copies of Desert for Quick Reference

Attractive loose-leaf binders in Spanish grain leather, gold-embossed, are available for those Desert readers who want to keep their back copies for the maps and travel information they contain. Each binder holds 12 issues. Easy to insert, and they open flat.

Mailed postpaid for  
\$2.00

THE *Desert* MAGAZINE  
PALM DESERT, CALIFORNIA

## NEW LOW PRICES!



ABOVE ILLUSTRATION SHOWS

1—Poly D-12 Arbor.....	\$19.95
2—Cast Splash Shields.....	15.00
1—100 Grit Wheel.....	7.25
1—220 Grit Wheel.....	8.25
1—Dresser Rest.....	2.25
1—Jig Block Diamond Dresser.....	9.50
2—Galvanized Splash Pans.....	5.50

\$67.70

ALL ABOVE ITEMS—\$59.95

VISIT OUR STORE  
TO SEE AND BUY

HIGHLAND PARK E-10, E-12, E-20

GEM CUTTING UNITS

ALL MINERALITE FLUORESCENT LAMPS

GEMMASTER UNITS

BY LAP. EQUIPMENT CO.

Heavy 18" Rhodium Plated Sterling Silver  
Neck Chains—2 for \$1.00. \$4.50 per dozen  
plus 20% Federal Tax and Postage.

FLUORESCENT BONANZA—Four pounds  
of brilliant fluorescent specimens of Can-  
adian Wernerite, Texas Phosphorescent  
Calcite, Franklin Willemite, Atolia Schee-  
lite Spud, and small slab rare Calcium-  
Larsenite. All for only \$2.00. Add post-  
age for 6 lbs.

### Faceted Round Gems of Synthetic TITANIA

have five times more ability than the  
Diamond to break light into its component  
colors producing a magnificent rainbow  
effect.

SEND FOR FREE PRICE LIST describing  
TITANIA RAINBOW JEWELRY

#### OTHER SERVICES OFFERED

JEWELRY REPAIR SERVICE

GEM STONE CUTTING

GEM CUTTING EQUIPMENT, MATERIALS,  
AND SUPPLIES

JEWELRY MAKING TOOLS AND MATERIALS  
MINERAL SPECIMENS

FLUORESCENT LAMPS, GEIGER COUNTERS  
URANIUM SAMPLES, FLUORESCENT  
MINERALS

FIELD TRIP GUIDE BOOKS

Send for Free 32 Page  
Complete Price List

## GRIEGER'S

1633 East Walnut Street

Pasadena 4, Calif.—Phone Sycamore 6-6423

# Amateur Gem Cutter

By LELANDE QUICK, Editor of The Lapidary Journal

Last month we discussed the "earth sciences," which we have concluded to call correctly "natural sciences" or "natural history," for we believe "earth science" is a misnomer and has come to include too many things and attempts to be all things to all people. As one Canadian correspondent wrote—"the earth science magazines will soon be including advice to nursing mothers and the best care for African violets."

Our discourse was prompted by a quotation from Thomas Huxley, written in 1854. It bears repeating, for we have seen during the last month the evidence that the rockhound is willing to take a look at his "paintings on the wall." Huxley said—"to a person uninitiated in natural history, his country or seaside stroll is a walk through a gallery filled with wonderful works of art, nine tenths of which have their faces turned to the wall."

At the April meeting of the Shadow Mountain Gem & Mineral Society here in Palm Desert we had Joseph Baker of Yuma, Arizona, give a talk entitled "Basic Rocks." I doubt if any college professor could give a geological address that would be more informative or more easily understood than Mr. Baker's. Certainly we have never heard a talk that made the uninitiated see the right side of the "picture on the wall" quite as quickly or clearly as "Basic Rocks."

It was at our behest that Mr. Baker made the talk and it developed into one of the most interesting evenings we have ever spent at a gem and mineral society meeting, a great many of which have been very, very dull indeed. No matter how well informed the people in our audience were I am sure that no one left for home without more useful knowledge than he had when he entered the room—the best test of any club program.

Mr. Baker told about the kinds of rock and then flashed slides of pictures he had taken to illustrate each point. An engaging speaker, he kept the strict attention of his audience through what could be a very dull lecture. Words like "basalt" and "conglomerate" came to mean something to the few who knew only the one word "agate." One remark was made that impressed us very much. The speaker told us that we were unique among animals in our appreciation of pretty rocks but that if you toss a handful of miscellaneous rocks into a cage with a monkey he will unerringly pick up the brightest and prettiest for a first examination; the only other animal than man who can apparently distinguish rocks by personal preference.

Mr. Baker gave this talk a little later to the San Diego Lapidary Society and we note in their bulletin that their editor wisely remarks "one part of the talk tended to show why some societies cannot keep the new members they get. These members join to learn something but no one seems to take them in hand and show them what they would like to learn about rocks."

Despite world wide reputation for being the most aggressive people on the face of the earth, the evidence is preponderant that we are the laziest people also. That is to say that a great percentage of our Yankee ingenuity is spent in finding short cuts to

avoid work. If it were not so we would not have developed the automobile to its present high efficiency, the electric dishwasher, vacuum cleaner, spray guns for painting, the sewing machine, the automatic milker, and you can take it from there right down the line to electric razors or brushless shave cream. We just love ease and luxury and mayhap it may be the thing that eventually defeats us as a nation.

When people say that a hobby is necessary to complete living but that two hobbies are better we always agree and say that we have two hobbies—gem cutting and avoiding work. We have been developing the latter hobby since we were eight years old and now we are rather proficient at it. Consequently we are always interested in anything that is developed that takes some of the work out of our other hobby—gem cutting.

Something has now come along that has removed most of the grief from lapidary work. It is the lightning change of sanding cloth and polishing buffs without ever having to unscrew a nut or change a wheel. This is accomplished by the use of a new fastening agent called "peel-em-off cement." To our lazy carcass this is a greater boon than radar or television.

Many a time we have been deterred from doing some gem-cutting when we realized that before we could begin to see that magic shine on the face of the wonderful gem, we would have to take all the tacks out of the sanding cloth and remove it from the disk; get the shears and cut out a new cloth disk from a larger piece of cloth, and waste as much as we eventually used. Then it would be necessary to wet that down and take fifteen minutes to tack it all around before we were ready to go again—providing we didn't have to go through the deal all over again on some other size grit. Then came the spring to hold the cloth on the disk instead of tacks. We never liked this because centrifugal force tossed it off when the sanders were run fast, as they have to be occasionally.

Now comes a flat aluminum light weight disk covered with sponge rubber that need never be taken off the spindle. The rubber surface just gets a coating of peel-em-off cement once in a while. While this is glue and holds things fast it is not that sticky kind of glue that clings like a poor relative. Just take a disk of No. 220 cloth that comes cut to size (no waste) and slap it on the wheel with the flat of your hand, just like you'd slap your mother-in-law, if you dared. Turn on the power and go to work. So you finish sanding the gem. Just pull off the sanding cloth like a piece of sunburned skin and slap on the leather buff and start your polishing. Oh brothers—this is a joy!

Felt flock will stick to the glue so use an old sanding disk and glue a flat piece of felt to that permanently and then slap on the combination. You can use leather directly providing the smooth side is the surface that goes on the cemented wheel. This idea can be applied to almost any existing equipment. To try to get along now without "peel-em-off" is like driving a Model T. We will tell you where to get this stuff if you will send along a self addressed postal to Palm Desert, California.



# Gems and Minerals

## FEDERATION READY FOR CONVENTION VISITORS

Rocky Mountain Federation of Mineral Societies is all set for its ninth annual convention, to be held June 26 to 29 in Canon City, Colorado. The American Federation of Mineralogical Societies will convene at the same time.

Commercial exhibits, fluorescent demonstrations, competitive and non-competitive displays will be housed in the Canon City High School, on U. S. Highway 50. Planned entertainment includes conducted tours to mines in the area, a chuck wagon buffalo barbecue, a banquet and a program by Koshare Indian dancers.

Since the regional Rocky Mountain Federation is host to the other four sections of the American Federation, each of the four convention days will be dedicated to one member group. June 26 is designated Midwest Federation day; June 27 is Eastern Federation day; June 28, California Federation day; and June 29, Northwest Federation day.

The convention committee suggests visitors bring camping equipment to Canon City, where there are many beautiful campsites. More than 62 percent of the land is unpatented, and very little is restricted by the Forest Service.

## DIAMONDS IN CALIFORNIA BUT DIGGINGS DON'T PAY

Diamonds can be found in California, according to Dr. Thomas Clements, head of the geology faculty at the University of Southern California. But a prospector undoubtedly would go broke looking for them.

About 10 years ago, Dr. Clements helped identify a diamond found near San Bernardino. "It weighed two or three carats and was of good quality and color," Clements remembers. "It would probably have been worth \$200 when cut."

The California Division of Mines says diamonds were found in the state soon after placer mining began. "A few of the stones found are more than two carats in weight and of good quality," the division reports, "but the majority are small and off color, usually with a pale yellow tinge. Most of these diamonds were found during the days when placer mining and hydraulicking were at their height, and since that time diamond finds have been less frequent."

A diamond mining company sank a shaft near Oroville at one time, but it proved unsuccessful.—*Los Angeles Times*.

## BOOK ATTEMPTS TO EXPLAIN WHY SCENERY IS ENJOYABLE

*Rockhound Record*, monthly publication of the Mineralogical Society of Arizona, urges amateur mineralogists and geologists to read *The Earth's Crust*, by Dr. L. Dudley Stamp, professor of social geography at the University of London. Dr. Stamp calls his work a "new approach to 'scenery'"; he presents examples of various land forms and attempts to explain why we enjoy them as scenery. Land models, reproductions of actual areas, are printed in color, and black-and-white plates emphasize certain details. "The text is brief," reports the *Record*, "but crystal clear."

## GIANT DRILL CORE MAY BE SEEN AT CONVENTION

Two sections of a serpentine drill core from the Idaho-Maryland mine near Grass Valley, California, will be displayed at the California Federation of Mineralogical Societies convention June 20-22 at Angels Camp, California. The sections are five feet in diameter, approximately seven feet long, and their combined weight is more than 18 tons.

This display represents the biggest mechanical drilling job in the world—the 1125-foot "round hole" (air and timber shaft) sunk by mining engineer J. B. Newsome in 1934.

Many other special exhibits and demonstrations are promised convention visitors. Fifty-five acres of improved campsites, space for 150 trailers, and more than 400 rooms are available for accommodations. The same arrangement for housing will be made as for the annual County Fair and Jumping Frog Contest, when Angels Camp played host to daily crowds of 15,000.

## COMPTON CLUB ADVANCES DATE FOR FALL ROCK SHOW

To avoid conflict with the Hollywood Lapidary Society show October 18 and 19, Compton Gem and Mineral Club has advanced its show dates to October 4 and 5. Exhibits will be arranged in the Veterans of Foreign Wars Hall in Compton, California.

Beach agate, petrified wood, some pink and white feldspar and an occasional piece of jade reportedly have been found at Big Lagoon, near Eureka, California. Members of Humboldt Gem and Mineral Society hoped to find some good specimens on a field trip to the area.

## GENUINE NAVAJO RUGS

Ideal for Desert, Beach and Mountain Homes

Hand Tooled Leather Bags

GOLD in Plastic Jewelry

Full Line of Lapidary Equipment and Supplies

Mineralights & Geiger Counters

Open House Tuesday Evening  
till 10:00 P.M.

### COMPTON ROCK SHOP

1409 S. Long Beach Blvd.

Compton, California

Tele. Nemark 2-9096

## The CONLEY Co. JEWELRY MOUNTINGS

New Illustrated Catalog  
20c in stamps or coin

The superb finish and fine craftsmanship of Conley's Elkhead Lifetime Pattern in 3-tone gold filled enables you to create exquisite jewelry equal to the finest professional shop. Other Conley mountings in Gold Filled—Silver and Plate. Lowest Possible Prices Consistent with Quality—Insist on Conley Quality.

AVAILABLE AT ALL  
BETTER DEALERS

or write  
**THE CONLEY CO.**

W. 715 Riverside Ave., Spokane, Wash.

## ALTA INDUSTRIES

New Address:

Box 19, Laveen Stage, Phoenix, Arizona

New Location:

South 19th Ave., 1/4 Mile North of Base Line  
**LAPIDARY EQUIPMENT**  
Lapidary Equipment Manufacture & Design  
16-18 Inch Power Feed Slabbing Saw  
Belt Sanders & Trim Saws  
(Send Postal for free literature)

## It's New !! It's Sensational !! LUSTERITE

The miracle polishing aid for all lapidaries

- Adds new luster and beauty to your stones.
- Perfected after years of experimenting by a professional lapidary with 30 years experience.
- Now offered for the first time to both professional and amateur lapidaries.
- Speeds polishing of all your stones.
- Eliminates drags and stone burns. For use on all stones excepting corundum.
- Economical—a little goes a long way.
- Used in conjunction with your usual powders it saves up to 50 per cent of their use.
- One trial will convince you.
- Complete instructions for use on each bottle.

Mail orders or ask your dealer

One ounce bottle — \$2.50

## LEO GARRITI, LAPIDARIES

424 S. Broadway

Los Angeles 13, California

# G E M M A R T

ADVERTISING RATE  
8c a Word . . . Minimum \$1.00

## AMONG THE ROCK HUNTERS

105 DIFFERENT MINERAL SPECIMENS \$4.50. Carefully selected. Makes a valuable aid in helping identify and classify your findings or makes a wonderful gift. Boxed and labeled. 70 different \$3.00, 35 different \$1.50. Add postage. Coast Gems and Minerals, 11669 Ferris Road, El Monte, California.

COMPLETE SET of patterns showing exact ring sizes, angles, squares, crosses and hearts and two types ovals. All five patterns for only \$1.00 postpaid. Cut your cabochons the exact size for mountings, Hastings Typewriter Co., Hastings, Nebraska.

ATTENTION ROCK COLLECTORS. It will pay you to visit the Ken-Dor Rock Roost. We buy, sell, or exchange mineral specimens. Visitors are always welcome. Ken-Dor Rock Roost, 419 Sutter, Modesto, California.

STOP—LOOK—BUY—Specimens slabs—rough, from A. L. Jarvis, Route 2, Box 125, Watsonville, California. On Salinas Highway State No. 1, 3 miles South of Watsonville.

PEANUT PITCHSTONE (Alamassite)—Mexico's oddest semi-precious stone, for polishing or collecting, 3-lb. chunk \$5 postpaid. Or, Rockhound special, 1-lb. fragments \$1. Also Flor de Amapa (pink crystallized edidote) rare. Same prices. Alberto E. Maas, Alamos, Sonora, Mexico. Send checks only.

FOR SALE: Most of the private personal collection of the late Chas. A. Swisher. Polished Agates, Crystals, Petrified woods, Minerals, some remaining cabochon sets for rings or bracelets. Mrs. C. A. Swisher, 4719 So. Hoover, Los Angeles 37, California.

DESERT GEM AND MINERAL SHOP. 16 nice specimens in box \$1.00 and postage. Wyoming jade, olive green 75c per sq. in. Slabs, nodules, geodes, cabs and large mineral specimens. Two miles west of Salome (where she danced) Arizona. L. C. Hockett, Box 276, Salome, Arizona.

CYCADS (PARTIALLY AGATIZED) \$1.25 per slice, 5 sq. in. up, postpaid. Floyd L. Mangum, 780 W 4 N., Orem Utah.

MINERAL SETS: 24 Colorful Minerals (identified) in 1x1 compartments, \$3.25 postpaid. PROSPECTOR'S SET — 50 minerals (identified) in 1x1 compartments in cloth reinforced, sturdy cartons, \$5.50 postpaid. Elliott Gem Shop, 235 East Seaside Blvd. Long Beach 2, California.

WE HAVE at all times a fine selection of cutting material and specimens. Specializing in Australian cutting fire opal. West Coast Mineral Co., 1400 Hacienda Blvd. (highway 39) La Habra Heights, California

MINERAL SPECIMENS and cutting material of all kinds. Gold and Silver jewelry made to order. Your stones or ours. 5 lbs. good cutting material \$4.00 or \$1.00 per lb. J. L. James, Battle Mountain, Nevada.

UTAH ROCKS: Stop and see me when you are in Salt Lake City. I have all kinds of Utah Agate, Topaz, Sun Stone, Snowflake Obsidian, Jade and many others. Write your wants and when you get here I'll have it or tell you where you can get it. No mail orders. Ed Dowse, 329 Reed Ave., Salt Lake City, Utah, Phone 38722.

ROCKHOUNDS, ARCHEOLOGISTS and collectors of Indian relics are discovering that Southern Utah is a rewarding section to visit. Write for free folder. Ranch Lodge Motel, Kanab, Utah.

\$6.00 BRINGS YOU 7 beautiful crystalized Colorado specimens. Ask for list of other fine crystals in stock. Jack The Rockhound, P.O. Box 86, Carbondale, Colo.

SEE THEM GLOW: Enjoy your black light, flash it over Langtry fluorescent Calcite stones. Really beautiful and unique. Just mail \$1.00 to Charlie Schmaubert, Box 58, Langtry, Texas and receive our special one pound specimen assortment. Shipped to you postpaid.

FIRE AGATES: In "Desert Roses" \$1.50 postpaid. (See April issue of Lapidary Journal). Arlene Dimick, Box 1795, Clifton, Arizona.

McSHAN'S GEM SHOP—open part time, or find us by directions on door. Cholla Cactus Wood a specialty, write for prices. 1 mile west on U. S. 66. Needles, California, Box 22.

PETRIFIED LIMB sections from Saddle Mountains, Wash., \$1.50 per lb., plus postage. For more information write Paul Rhoades 1508 Fairview Ave., Yakima, Washington.

TRADE 5 ARIZONA SPECIMENS including Azurite nodule, Chrysacolla, Asbestos, Peridot, Amethyst quartz, for 2 cabochons. No culls. Also 10 Apache Tears for any specimen. Have native copper. Write Don Jackson, Box 1826, Globe, Arizona.

BRAZILIAN AGATE MARBLES \$1.00 each. Onyx blanks, unpolished, black 25c each, red, green, blue, 35c each. Perfect cut Titanium. Fine cutting and polishing at reasonable prices. Prompt attention to mail orders. Juchem Bros., 315 West 5th St., Los Angeles 13, California.

LARGE STOCK of rocks, relics, antiques, re-leased for sale. 5 miles east of Banning, California on highway 99, Cabazon, California.

SELLING OUT—fine large rock and mineral collection. Located one mile from Jamestown, California, on Hwys 49 and 108 at the Wigwam. Forced to sell out as the highway left me. Twin Pines Trailer Court, Box 78, Jamestown, California.

FOR SALE: Beautiful purple Petrified Wood with Uranium, Pyrolusite, Manganite. Nice sample \$1.00. Postage. Maggie Baker, Wenden, Arizona.

BERYL CRYSTALS, Columbite, Tantalite, Purpurite, Andalusite Crystals, Rose Quartz, Hell's Canyon Agates. Mac-Mich Minerals Co., Custer, So. Dakota.

"TUNGSTEN PROSPECTORS," Fluorescent Collectors. Mineralights at Superior Gems & Minerals, 4665 Park Blvd., San Diego 16, Calif. Write for free literature.

"DON'T MISS" Fine rough gems, Minerals, Silver and Lapidary supplies at Superior Gems & Minerals, 4665 Park Blvd. San Diego 16, California. (Sorry, no lists.)

RADIOACTIVE ORE COLLECTION: 6 wonderful different specimens in neat Redwood chest, \$2.00. Pretty Gold nugget, \$1.00, four nuggets, \$2.00, choice collection 12 nuggets, \$5.00. Uranium Prospectors, Box 604, Stockton, Calif.

TITANIA GEMS \$5.00 per carat for stones over 3 carats. Also mounted in 14K gold rings. All precious gems at lowest prices. Ace Lapidary Co., Box 67, Jamaica, New York.

FIFTY MINERAL SPECIMENS, ¾-in. or over, boxed, identified, described, mounted. Postpaid \$4.00. Old Prospector, Box 729 Lodi, California.

20 ASSORTED COLORFUL 2x3 cabinet specimens. Good for a beginner or to add to your present collection. This beautiful selection only \$8.00 postpaid. L. M. Jones. Box 56, Bell Gardens, California.

Speleology, the study of caves, was scheduled topic for the April meeting of Chicago Rocks and Minerals Society. Speaker Hugo Herschend of Wilmette, Illinois, owns Marvel Cave near Branson, Missouri. The 32 explored miles of this cave are equipped with electric lights and steps for comfortable exploration.

Edna Nichols is newly-elected president of San Jacinto-Hemet Rockhounds. John Fett is vice-president; Ethel Harwell, secretary-treasurer; Tom Harwell, field planning chairman; and Jay Nichols, assistant field planning chairman.

In the Spring issue of *Gritzer's Geode* are listed suggestions for rockhounds planning summer trips to Arizona.

Mrs. Norman Pendleton demonstrated casting techniques at the April meeting of San Jose Lapidary Society.

New officers of Kern County Mineral Society are Paul Zimmerman, president, and E. Flitcraft, vice-president. H. D. Bushey was re-elected secretary-treasurer; John Kennedy will continue as field scout and E. L. Harman as editor of the club bulletin, *Pseudomorph*.

Los Angeles Lapidary Society learned of oriental history and legends of jade from guest speaker, Dr. Chang Wen Ti. "During the Sun dynasty, jade carving was perfected as an exquisite art," said Dr. Chang, "but unfortunately, it is now a lost art. Young artisans become discouraged by the long period of apprenticeship necessary for one to become proficient." He displayed carved figurines.

In the April issue of *Mineral Notes and News*, Vivienne M. Dosse of Orange Belt Mineralogical Society lists hints for planning a show display.

Because of its porous nature, tigereye or crocidolite may be colored by soaking in aniline dyes. Heating the dye liquid aids penetration. The gem often is colored pale green or dull yellow to simulate the chrysoberyl cats eye.

Members of Eldorado Gem and Mineral Society of Placerville, California, reported finding good barite specimens and quartz crystals on a field trip to Carson Hill.

John Hutchins, mechanical engineer stationed 15 months in Korea, told members of San Diego Mineral and Gem Society about the country's mineral deposits.

Elected to lead Washoe Gem and Mineral Society, Reno, through 1952 were Glenn Drew, president; Len Vance, vice-president and program director; Garland Smith, secretary-treasurer; Emily Lambert, publicity director, and Elisse Eichelberger, librarian. Two of the first responsibilities of the new board will be planning the annual club banquet and arranging for hobby show exhibits.

Two field trips were scheduled April 19 and 20 by Fresno Gem and Mineral Society. One group planned to visit California's Calico Mountains, and another would search for Horse Canyon agate.

## FIRE OPAL MEXICO

10 Small Pieces Average ¼"	\$1.00
5 Larger Pieces Average ¾"—1"	1.00
12 Nice Pieces Cherry & Honey Opal	1.00
1 Small Vial Clear Fire Opal	1.50
1 Large Vial Clear Fire Opal	3.00

\$7.50

Entire Lot Postpaid for \$5.00

EXCHANGE: Agate or other cutting material, rough or polished, for good postage stamps.

Satisfaction Guaranteed

**RALPH E. MUELLER & SON**  
1000 E. Camelback Road  
Phoenix, Arizona



## TWO NEW GEM AND MINERAL SOCIETIES JOIN FEDERATION

Two newly-organized members of the Rocky Mountain Federation of Mineral Societies are the Pueblo Rockhounds of Pueblo, Colorado, and the Wichita Gem and Mineral Society of Wichita, Kansas. George Sherman is president of the former, assisted by Jesse Myers, vice-president, and William Doertenbach, secretary-treasurer. Officers of the Wichita group are Stephen B. Lee, president; Bruce A. Helfrich, vice-president; Mrs. Walter J. Broderson, secretary, and J. Walter Fischer, treasurer.

Dr. Eugene Staritzky was scheduled speaker for the April meeting of Santa Fe Gem and Mineral Club.

Searles Lake Gem and Mineral Society of Trona, California, joined a group from the Naval Ordnance Training Station at nearby China Lake for a trip to collect sandstone crystals in the Base area.

Of interest to mineral collector, lapidary and geologist was the April meeting of Compton Gem and Mineral Club. James Small spoke on "Geology and Basic Occurrence of Gemstones."

The first Unakite was found in the Unaka National Forest of North Carolina, reports *Earth Science News*. The *News*, organ of the Earth Science Club of Northern Illinois, first heard of Unakite from Dr. Waldo H. Jones of South Carolina, who calls it a "granite mineral." The rock has great variations in color, texture and general composition.

## GEM GROUP CHOOSES NEW SLATE OF OFFICERS

Santa Monica Gemological Society held elections in April, planning to install new officers in May. Harold H. Hagen is new president; C. E. Hamilton, first vice-president; Mrs. Florence G. Strong, second vice-president; Edwin S. Jacobsen, treasurer; Mrs. Martha Eberhart, recording secretary, and Muriel Bodwell, corresponding secretary.

Via roads bordered with California poppy, shooting star, Indian paintbrush and lupine, a field trip group from East Bay Mineral Society drove from Oakland, California, to Manhattan Mine. An onyx vein was found 125 feet into the mine tunnel. Farther on some searchers found cinnabar, marcasite and pink banded onyx. A few pieces of cutting quality myrrickite were picked up on outside dumps.

Gila Valley Gem and Mineral Society and the Mineralogical Society of Arizona held a joint field trip to the canyon of the Gila River below Coolidge Dam.

## JASPER JUNCTION LAPIDARY

4909½ Eagle Rock Blvd. — CL. 6-2921  
Los Angeles 41, California

## WORK SHOP

1112 Neola St. — CL. 6-7197  
Los Angeles 41, California

WE SPECIALIZE IN CUTTING BOOKENDS  
Custom sawing and polishing—24" saw  
Slabs, bulk stone, Mineral Specimens  
Polished Specimens & Cabochons  
Machinery & Supplies

We rent polishing machinery by the hour

INSTRUCTION AT NO EXTRA COST

Call CL. 6-7197 for Appointment

"You'll love"

## CONLEY MOUNTINGS

Beautiful, enduring, easy setting

Write for FREE catalog

WHOLESALE & RETAIL DISTRIBUTORS

## SUPERIOR GEMS & MINERALS

4665 Park Blvd. San Diego 16, California



**BEFORE YOU BUY  
SEND FOR OUR BIG FREE CATALOG**

The world-famous HILLQUIST LINE of lapidary equipment

**LAPIDARY EQUIP. CO. 1545 W. 49 ST., SEATTLE 7, WASH.**

## Coast Gems and Minerals

## SLABS

40 to 60 square inches—\$2.00

DON'T keep wondering what our slab assortment is like—instead, send \$2.00 at once and find out. You will receive a piece of jade, tiger's eye, lapis, selenite, palm, and at least 5 others, 40 to 60 sq. in.—1 to 1½ lbs.

CHUNK CUTTING MATERIAL—8 lbs. \$2.00

### TITANIA

(Top quality white boules) Guaranteed—per carat—\$8.00.

### MEXICAN OPAL

¼-lb. Honey & Cherry—No Fire.....\$1.00  
¼-lb. Honey & Cherry—With Fire..... 4.00  
¼-lb. Specimen opal in matrix..... 1.00  
Opal in matrix—for cabochons, ea..... .25  
Clear opal for faceting, ea..... .50

### Precious Rough Facet Material

¼-lb. Precious Topaz, mine run.....\$1.50  
¼-lb. Amethyst (for cabs. & small facet)..... 1.00  
¼-lb. Amethyst (for faceting), Mex..... 5.00  
¼-lb. Peridot, mine run, Ariz..... 3.00  
¼-lb. Kunzite, mine run, (Pala, Cal.) 1.50  
¼-lb. Sunstone, mine run..... 3.00  
10-gram Garnet, (Mex.)..... 3.00

### Sale on Over-Stocked Minerals

\$10.00 to \$12.00 worth specimens for \$5.00  
Our choice. State price range you desire such as—5c to 25c—25c to 50c—50c to \$1 to \$2 each, etc.

### Satisfaction Guaranteed

Equipment — Mountings & Findings Supplies

Send for Our Circular Today

Please add postage to all orders. If not a dealer, add 20% Fed. Tax. to slabs, precious rough and faceted stones. California sales tax.

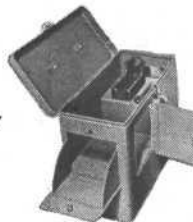
11669 Ferris Road—El Monte, Calif.  
FOrest 8-7551

### MINERALIGHT SL 2537



All purpose lamp, operates on 110V AC, weighs only 1 lb., \$39.50

### FIELD CASE NO. 404



Contains special battery circuit for MINERALIGHT SL 2537. Case holds lamp, batteries, built-in daylight viewer. \$19.50 (Plus Bats. \$4.50)  
Complete: SL 2537, 404 CASE, BATS. \$63.50

### MODEL M-12



Completely self-contained, battery operated, weighs only 3¼ lbs. \$34.50 plus battery (80¢)

## Strike it Rich!

FIND STRATEGIC MINERALS, HIDDEN WEALTH WITH ULTRA-VIOLET

## MINERALIGHT!

MINERALIGHT instantly locates, identifies vital minerals, saves hours of fruitless search.

Invaluable for prospectors, miners, engineers and hobbyists, MINERALIGHT helps you find tungsten, uranium, mercury, zirconium—many other minerals now being sought for use in vital preparedness work.

### LEARN TO RECOGNIZE VALUABLE MINERALS!

Mineral sets, packaged in varied assortments, help you. Ultra-violet MINERALIGHT rays show them in all their exciting colors. Only \$2.50 per set of 10 specimens, carefully packaged in foam plastic.

Special MINERALIGHT models for crime detection, entertainment, mineralogy and mining, and laboratory research. Bulletins available describing ultra-violet MINERALIGHT use in many fields and telling you how you can make extra money, enjoy an exciting hobby at the same time. See Your Mineralight Dealer or Write Dept. SL 2-21



## ULTRA-VIOLET PRODUCTS, Inc.

145 Pasadena Avenue, South Pasadena, Calif.

**EXTRA SPECIAL: Trinitite**—the new mineral fused by the first atomic bomb blast at Alamogordo, New Mexico. Mounted in foam plastic and beautifully packaged. Still slightly radio-active but guaranteed harmless. Terrific collector's item at 25c. See your dealer. Ultra-Violet Products, Inc., South Pasadena, California

## Covington DIAMOND BLADES

"Treat yourself to the best"



	Heavy-Duty Super-Chgd.	Super- Charged	Standard Charged
6"	\$	\$ 8.60	\$ 7.60
8"		10.95	9.95
10"		14.50	13.35
12"		21.20	17.65
14"		27.95	24.45
16"		31.20	27.70
18"	62.50	41.25	34.40
20"	74.25	49.50	37.95
24"	88.80	62.60	48.95
30"	142.50	119.75	State
36"	215.30	179.10	Arbor

sales tax in California. Size

Allow for Postage and Insurance

### Covington Ball Bearing Grinder

and shields are furnished in 4 sizes and price ranges to suit your requirements. Water and grit proof.



### COVINGTON 8" TRIM SAW



and motor are compact and do not splash. Save blades and clothing with this saw.

### BUILD YOUR OWN LAP

and SAVE with a COVINGTON 12" or 16" Lap Kit. We furnish everything you need. Send for free catalog.



COVINGTON Multi-Feature 16" Lap Unit Does everything for you.

COVINGTON 12" 14" or 16" Power Feed Diamond Saws



SAVE BLADES

Send for New Catalog, IT'S FREE

COVINGTON LAPIDARY SUPPLY  
Redlands, California

## LONG BEACH SOCIETY ELECTS RALPH PAUL

Ralph Paul was elected president at a recent meeting of Long Beach Mineral and Gem Society. Other officers for 1952 are Mrs. Jessie Hardman, vice-president; Harvey Hawkins, treasurer, and Mrs. Marjorie E. Erdal, secretary.

Representatives from 49 of the 64 societies comprising the California Federation of Mineralogical Societies attended the Federation directors' meeting April 19 in Angels Camp, California. Plans were completed and reports made on the June convention. Following dinner, the directors made an after-midnight field trip to Calaveras cement quarry to search with fluorescent lights for calcite crystals.

Mrs. H. T. Daniels was featured speaker at a recent meeting of the Oklahoma Mineral and Gem Society of Oklahoma City. She outlined a plan for study of quartz, assigning the mineral's various forms to members for research and subsequent report. As each speaker describes his particular type, he will mount a small specimen on a chart representing the quartz family tree.

## NEW—Sensational! GEIGER COUNTER



"The SNOOPER"  
LOW PRICE ONLY \$24.95  
COMPLETE

Find a fortune in uranium with this new, super-sensitive Geiger Counter. Get one for atom bomb defense. So small it fits in the palm of the hand or in the hip pocket, and yet more sensitive than many large, expensive instruments. Weighs only 1 1/4 lbs. Uses flashlight battery. Low price includes earphone, radio active sample, instructions. Sold with ironclad moneyback guarantee.

ORDER YOURS TODAY—Send \$5.00 with order or payment in full to save C.O.D. Write for free catalog on treasure finders for gold, silver, etc. and larger, more elaborate Geiger Counters.

DEALER INQUIRIES PRECISION RADIATION INSTRUMENTS  
INVITED 2235 D S. LA BREA, LOS ANGELES 16, CAL.

## FAMOUS TEXAS PLUMES

Red Plume, Pom Pom and many other types of agate. Slabs on approval. Rough agate, 8 lb. mixture postpaid, \$5.00. Price list on request.

WOODWARD RANCH  
17 miles So. on Hwy 118  
Box 453, Alpine, Texas

## ANNUAL SHOW PLANNED WITH FARMERS FAIR

San Jacinto-Hemet Gem and Mineral Club again will hold its annual show in conjunction with the Riverside County Farmers Fair in Hemet, California. Dates for this year are August 27 through September 1. Edna P. Nichols is 1952 president of the society.

After each member's name in the 1952 directory of California Federation of Mineralogical Societies will appear a legend indicating his interests—crystals, minerals, lapidary, fossils or jewelry—and whether he has material to trade.

After searching unsuccessfully for sage-nite agate on Agate Mountain and Sagenite Hill in California, members of Delvers Gem and Mineral Society, Downey, decided to visit the travertine deposits at the mouth of Mule Canyon. Their luck changed, and everyone brought back a good selection.

Pointing out that all Japan consists of a range of volcanic mountains, Dr. J. Harlan Johnson told Colorado Mineral Society about his trip to the Islands last summer. He made special mention of Mt. Aso, on Kyushu Island, and Mt. Mihara, on Oshima Island, both of which were active during his visit.

Heading for the Berkeley hills and an agate nodule field, members of the Gem and Mineral Society of San Mateo County followed Lloyd Underwood on the club's April field trip.

Armed with hammers, screens and shovels, mineral resources division members of San Diego Mineral and Gem Society traveled to the Clark Mines at Rincon to look for morganite.

Mineral interest in caves was reported by Loren Whitelock at a meeting of Pacific Mineral Society, Los Angeles. Whitelock told particularly of the Lost Soldier's Cave in Sequoia Park, showing colored slides of unique formations of travertine, dolomite, calcareous tufa and feathery Iceland spar.

A case displaying rough and polished agate specimens is being prepared by El Paso Mineral and Gem Society for presentation to the National Museum in Washington, D. C.

## Here Are The Gifts You've Been Looking For!

Petrified Wood, Moss Agate, Chrysocolla  
Turquoise, Jade and Jasper Jewelry

HAND MADE IN STERLING SILVER

Bracelets, Rings, Necklaces, Earrings  
and Brooches

SPECIALLY SELECTED STONES WITH  
CHOICE COLORS AND PICTURES

Write for Folder With Prices

## ELLIOTT'S GEM SHOP

235 East Seaside Blvd. LONG BEACH 2, CALIF.  
Across from West End of Municipal  
Auditorium Grounds  
Hours 10 A. M. to 9 P. M. Daily Except Monday



ALLEN  
JUNIOR  
GEM  
CUTTER

A Complete Lapidary Shop  
Only \$43.50

- Ideal for apartment house dwellers.
- Polish rocks into beautiful gems.
- Anyone can learn.
- Instructions included.

Write for Catalog, 25c

ALLEN LAPIDARY EQUIPMENT  
COMPANY—Dept. D

3632 W. Slauson Ave., Los Angeles 43, Cal.  
Phone Axminister 2-6206



## EAST BAY MINERAL SHOW TO BE HELD IN OAKLAND

Annual show of the East Bay Mineral Society will be held June 14 and 15 in the Masonic Temple, 6670 Foothill Boulevard, Oakland, California. Hours are from 11 a.m. to 10 p.m. on Saturday and from 10 a.m. to 9 p.m. on Sunday.

A general introduction to archeological survey methods formed the program at a recent meeting of the archeological section of the Earth Science Club of Northern Illinois. Material included reasons for a survey, types of surveys, preparations, maps, field work and aerial photography.

Carved of agate, quartz crystals, jade, slate, glass and other stones, the Chinese snuff bottles of C. N. Laird were displayed at a meeting of Pasadena Lapidary Society.

Florida's Seminole Indians were described by 12-year-old George Preston when he appeared as speaker for Yavapai County Archeological Society, Prescott, Arizona. As George told of Seminole life, his mother, Mrs. George Preston, showed colored slides.

"Conchologists know of more than 100,000 species of shell life," reported President Ernest E. Michael when he spoke to members of the Yavapai Gem and Mineral Society. Michael showed choice specimens from his collection of 5000 sea shells.

Because the membership has grown so large, Minnesota Mineral Club has adopted a set of rules for convoy driving on field trips. Each car is identified by a pennant and follows the car ahead at a specified distance and specified speed. The travel plan is designed to increase safety and eliminate confusion when many members participate in a single field excursion.

March-April issue of Oklahoma Gem and Mineral Society's *Sooner Rockologist* includes a pronouncing list of gem names.

Fine crystal specimens—most of them with inclusions and many with phantoms—were promised participants in the Shadow Mountain Gem and Mineral Club field trip to the crystal hill collecting area a few miles south of Quartzsite, Arizona. Members planned also to attend the Blythe Mineral Show.

Junior members of Coachella Valley Mineral Society followed *Desert Magazine's* directions to the Borrego Badlands concretion beds. Intrigued, the youngsters gathered many of the peculiar sandstone formations.

## HOLLYWOOD LAPIDARIES ANNOUNCE SHOW DATES

Members of Hollywood Lapidary Society have decided on October 18 and 19 as dates for their Fifth Annual Lapidary and Gem Exhibit. The show will be held at Plummer Park, Hollywood, California.

Preparing for a discussion of mineral associations, the program chairman of the Mineralogical Society of Arizona distributed among members mimeographed sheets on which all identified Arizona minerals were grouped into classes. The classes were determined by association with other minerals and not by physical properties or chemical composition. Minerals of four groups were outlined in detail: primary minerals (largely ore); secondary minerals derived from primary ore; contact metamorphic minerals, and pegmatite minerals. Most specimens found by amateur collectors fall into these four groups. Less common classifications also were discussed.

A copy of J. B. Streeter's *Precious Gem Stones and Minerals*, published in London in 1882, has been presented to the San Diego Lapidary Society library by James A. Moore.

### NEW CATALOGS AVAILABLE

If you want Choice Cutting Material, Fine & Rare Materials, Geiger Counters, Mineralogicals, Books, Trim Saws, Fluorescents, Ores, Gems, Ring Mounts, or advice, write to . . .

### MINERALS UNLIMITED

1724 University Ave., Berkeley 3, California

### Agate Jewelry Wholesale

Rings — Pendants — Tie Chains  
Brooches — Ear Rings  
Bracelets — Matched Sets  
— Send stamp for price list No. 1 —

### Blank Mountings

Rings — Ear Wires — Tie Chains  
Cuff Links — Neck Chains  
Bezel — Cleavages — Shanks  
Soldier — Findings  
— Send stamp for price list No. 2 —

### O. R. JUNKINS & SON

440 N.W. Beach St.  
Newport, Oregon

Two speakers were scheduled to share the rostrum at the April meeting of Sacramento Mineral Society. C. M. Goethe chose "Rockhound Knowhow" as his subject, and L. J. Bergsten of Oakland was to discuss jade. He planned to show many rare pieces from his collection.

A colored-slide tour of the high Sierras was conducted by Vice-President Orlin J. Bell of East Bay Mineral Society at a meeting in Oakland, California. Bell told the geological history of the range, pointing out the effect glaciers had in forming valleys and lakes.

## Does Everything . . .



HILLQUIST

*Gemmaster*

\*without motor.

### COMPARE!

● Put the Hillquist Gemmaster beside any lapidary machine — cheaper, flimsy "gadgets" or units that sell at twice the price. Compare construction! Compare ease of operation! Compare how much you get for your money and you'll say, "I'll take the Gemmaster!"

Here is a worthy companion for our larger and more expensive Hillquist Compact Lapidary Unit. The smaller in size, the Hillquist Gemmaster has many of the same features. It's all-metal with spun aluminum tub. You get a rugged, double-action rock clamp, not a puny little pebble pincher. You get a full 3" babbitt sleeve bearing and ball thrust bearing. You get a big 7" Super Speed diamond saw and all the equipment you need to go right to work.

### USES ALL ACCESSORIES

You can use all the regular Hillquist accessories with the Gemmaster: The Hillquist Faceter, Sphere Cutters, Laps, Drum and Disc Sanders, etc.

### WRITE FOR FREE CATALOG

COMPLETE, READY TO USE! YOU GET ALL THIS—



BIG 7" Diamond Saw • 6" x 1" Grinding Wheel • 6" Felt Buff • 6" Backing Wheel • 6" Disc Sander • Double-action Rock Clamp • Oil Feed Cup • Water Feed Hose & Clamp • Dop Sticks & Dop Wax • Polish, Compound, Etc.

BUILT FOR LONG SERVICE!  
No other low-cost lap unit gives you full 3" sleeve bearing, ball thrust bearing and pressure lubrication.

*Lapidary* EQUIPMENT CO., INC.

1545 WEST 49TH ST., SEATTLE 7, WASHINGTON

## BLACK LIGHT KITS

110 VOLT LONG WAVE

### FOR ULTRA-VIOLET FLUORESCENCE

NOW . . . you can build your own black light equipment at a new low cost with these easy-to-assemble components. Geologists, mineral prospectors and hobbyists can easily make laboratory black lights for mineral identification. Signs, posters, pictures, fabrics, house numbers . . . anything painted with fluorescent paint glows with eye-appealing fluorescence under black light. Kit contains: Ultra-Violet tube, brackets, ballast, starter, wire, plug and wiring diagram.

**Special!** 4 Watt Kit—(5 1/4" tube) . . . \$3.00  
8 Watt Kit—(12" tube) . . . \$4.00

Enclose full amount with order • Equipment shipped postpaid

## C & H SALES COMPANY

2176 EAST COLORADO STREET

PASADENA, CALIFORNIA



By RANDALL HENDERSON

**A**S A HIGH SCHOOL boy in Iowa many years ago I spent long hours digging dandelions out of the front lawn. Dandelions were noxious weeds—and every spring rain brought a fresh crop of them. Their only mission on earth, as far as I was concerned, was to take the joy out of my Saturday school holiday.

We have dandelions on the desert too, an entirely different plant genus that has little in common with its lawn-invading namesake—and I have had to forget my old prejudice against the name. For our wild dandelion of the desert is one of our prettiest flowers.

A few days ago Cyria and I were out taking pictures of this year's exceptionally colorful wildflower display. We drove up the bajada that leads from Highway 60 to Cottonwood Spring in eastern Riverside County. The southern slope at the base of the Cottonwood Mountains was carpeted with the canary yellow blossom of dandelion, sprinkled with California poppies. These lovely wildlings of the desert never invade people's lawns, and if they did I am sure they would be welcome visitors.

Within recent years the historic old waterhole at Cottonwood Spring has been included in the Joshua Tree National Monument and the rangers have converted it into a well-kept picnic ground for visitors. A trail leads over the ridge from the Spring to Lost Palm Canyon—and many winter visitors to Palm Springs have taken a Nature hike over this trail with Lloyd Mason Smith of the Desert Museum. (*Desert Magazine*, Dec. '51.) Thanks to Lloyd's initiative, many hundreds of those who come to this desert area every winter are learning what the old-timers already know—that one has to get away from the paved highways to discover the real charm of the desert.

They've been exploding bombs on the Nevada desert again. It has been rather hard for those of us who have spent much of our lives on the desert to become reconciled to the idea that so much of this last retreat for space-loving Americans should be taken over as a laboratory in which to perfect the instruments for mass destruction of human life.

Perhaps it is necessary. I do not know. But I hope that one of these days it will be possible to turn back the desert to the peaceful pursuits of those people who are coming to this arid Southwest in increasing numbers each year for escape from the enervating pressures of commercial and social life in the congested centers of population.

I am wondering if we Americans are not giving exaggerated importance to the threat of communism. I cannot believe that a philosophy as starkly materialistic as is the doctrine of Karl Marx can long retain a dominating place in the world of human affairs—especially when the interpretation and application of that doctrine remain in hands as ruthless as those in the Kremlin.

You and I have been taught, and we believe in ideals

which extend to all men the right of life, liberty and the pursuit of happiness. If that teaching is true, then communism carries the seeds of its own destruction.

I believe with Herbert Hoover that we should keep ourselves defensively strong—and morally and economically strong—and discard the notion that we must meet communism's force with force around the world. It is too big a job—and in undertaking it there is a very great danger that we may undermine the morale of our home front—and in the end defeat the worthy purpose we were seeking to serve.

\* \* \*

I am glad to report that since November when we began putting a jacket in full color on *Desert Magazine* each month, the increased revenues from circulation have more than covered the additional costs. This information is given to reassure those who wondered if we were going to raise the subscription price to pay for the extra plates and presswork.

Unless inflation goes far beyond its present limits, there will be no increase in the selling price of *Desert*. Thanks to the loyalty of our more than 100,000 readers, *Desert* does not have to spend as much on promotion as do many other publications. While it is true the cost of labor and materials have advanced during the last three years, the growing efficiency of our plant and organization have fully absorbed these costs.

My guess is that the peak of the inflationary period has passed, and that in the months ahead most of the things you and I buy will cost less rather than more.

\* \* \*

The seasonal rains this year brought unusually brilliant bloom to the Indigo bush. This shrub is a cousin of the Smoke tree, and its flower is about the same shade of purple. You'll find it growing on the bajadas at the base of the desert mountains. It is not a pretty shrub—until April, when it is covered with a mass of intense indigo blossoms. Then it becomes one of the most gorgeous plants on the desert.

I am wondering if the botany teachers in the schools still are teaching dry scientific botany—which is mostly a memory course in names. Or are they unfolding to their pupils the magic and beauty of creation—and its relation to human problems. I hope they are teaching that within the secret compartments of the Indigo bush and the other ugly ducklings of the plant world there is often concealed a germ of beauty which under certain conditions will burst forth in regal beauty. And that humans are like that.

The teaching of botany, arithmetic, spelling and history has little meaning unless it contributes to a better understanding of human beings themselves, and toward the solution of the everyday problems in human relations.

I am sure that many of the teachers realize this.



# Books of the Southwest

## BOOK ON METEORITES WRITTEN FOR THE LAYMAN

Interest in the study of meteorites—masses of stone and metal from out of the sky—has grown rapidly in the last 150 years. Recently it has become as much of a challenge to the imagination of the general public as it has to men of science.

Where do meteorites come from? What are they made of? What factors are responsible for their peculiar structure? How fast do they travel, and what happens when they collide with the earth or the moon?

Fascination with man's only physical contact with outer space has led astronomers, geologists, mineralogists and now a new group of scientists, meteoritists, to search for the answers to these questions. The theories they have developed over the years are set forth in *Out of the Sky*, an authoritative, easy-to-read volume written by one of America's most active meteoritists, H. H. Nininger.

As the author states in the preface, the book is "intended first to serve those persons who read popular science out of sincere curiosity about the physical universe." Drawing from 28 years' experience in meteorite research, Nininger presents a non-technical foundation for the study of meteorites. More than 170 photographs, arranged in 52 pages of plates, graphically illustrate the comprehensive text.

Published by the University of Denver Press. 336 pages, bibliography, index. \$5.00.

## PRIEST DESCRIBES EARLY LIFE IN BAJA CALIFORNIA

"Everything concerning California is of so little importance," wrote Father Johann Jakob Baegert, "that it is hardly worth the trouble to take a pen and write about it. Of poor shrubs, useless thorn bushes and bare rocks, of piles of stone and sand without water or wood, of a handful of people who, besides their physical shape and ability to think, have nothing to distinguish them from animals, what shall or what can I report?"

Thus Father Baegert, in *Observations in Lower California*, described California and its people after 17 years as a Jesuit missionary—1751 to 1768.

But the German padre had seen only a small portion of California. His ministry had been limited to a sector at the south end of the peninsula—the peninsula we know today as Baja Cali-

fornia. When the Jesuits were recalled from the Baja California missions in 1767 by order of the Spanish Crown, Father Baegert returned to Germany and wrote an account of his observations in the New World. It was not until this year that a complete translation of his book was made by M. M. Brandenburg and Carl L. Baumann for the University of California Press.

For the native Californians, at the time of Father Baegert's sojourn, life was a constant struggle for food. The desert land in which these people lived, yielded so little that much of the time they were on the verge of starvation. The padre was very frank in recording the many vices and the few virtues of the savages among whom he worked, and yet he toiled faithfully, along with the other Jesuit Fathers assigned to duty in Baja California, to feed them and cloth them and save their souls from hellfire.

The book is an amazing revelation of primitive life at its lowest level in the American world which had been brought under Spanish rule. It is also a vivid revelation of the obstacles which the early day missionaries in California had to face and surmount.

In reading the book one also gets the impression that the volume represents a masterly achievement in translation.

Published by University of California Press, 1952. 218 pp. Index. Map. \$5.00.

## HUMORIST OF OLD FORT IN ROLE OF PUBLISHER

Fed up with the make-believe of Hollywood where he had served as an art director for many years, Harry Oliver moved out to a homestead in Borrego Valley in the '30s—and there he wrote and published *Desert Rough Cuts—a Haywire History of the Borrego Desert*.

The book was entirely fiction—but it was good desert humor, and the limited edition was soon sold out. Also, it gained for its author recognition as a desert humorist.

In more recent years Harry has been making his home at Ol' Fort Oliver, the adobe replica of a California mission which he built with his own hands at Thousand Palms, California—and publishing the quarterly *Desert Rat Scrapbook*—"the only 5-page newspaper in the world."

Last month Harry published his sec-

ond book—a reprint of *Desert Rough Cuts* with much material added.

In the new book, *The Mirage Salesman*, Harry restores to circulation the fanciful characters of the previous edition—Liminatin' Lem, Colonel Kashin, Dry Wash Smith, Slim Law, "Deef" Dan and a score of others. And with that flair for showmanship which once made him a very successful movie art director, Harry gets into the act himself—as another desert "character." In fact, he just about steals the show.

There are many laughs in *The Mirage Salesman*, and bits of homely philosophy—some of it original and some of it quite frankly borrowed from others, with due credit to the source.

Published by Harry Oliver, Thousand Palms, California. 115 pp. Illustrated with wood cuts and line sketches. \$3.00.

## BOOK ANALYZES WORK OF EIGHT NEW MEXICO ARTISTS

Evaluating the work of a group of American artists who draw upon the Southwest's rich and unique resources for their inspiration, *New Mexico Artists* is a collection of eight art critiques.

The book is the result of a successful Guest Artist series which appeared in the *New Mexico Quarterly*. It is the third publication in the New Mexico Artist Series.

Each critique presents background material on the artist as well as an analysis of his work. Reproductions of paintings, woodcuts and sketches illustrate style and technique.

The artists are John L. Sloan, Ernest L. Blumenschein, Gustave Baumann, Kenneth M. Adams, Adja Yunkers, Raymond Jonson, Peter Hurd and Howard Cook. The mood of their works ranges from traditional landscape and portrait painting to non-objective design and abstraction.

Published by University of New Mexico Press. 131 pages. \$3.00.

1952 Edition of

## The MILEPOST

is now available

This 132-page guide book with map of the highway to Alaska, and the highways within Alaska is just off the press. It is an indispensable book for those planning a motor trip to the great North Country.

\$1.00 Postpaid

DESERT CRAFTS SHOP

Palm Desert, California

# MEN WHO BLAZED THE TRAILS

Today more than 1,500,000 Americans enjoy the benefits of good homes, paved roads, cultivated valleys and prosperous business institutions in that great arid land which extends from the Rocky Mountains to the Sierra of California. But it required a hundred years of exploration, of Indian warfare and of engineering and building in the face of terrific obstacles to bring these things to pass.

Here are the stories of the men who did the pioneering in this great desert land — who blazed the trails, fought off the Indians, discovered the mineral wealth and built the foundations for the towns of today. This is a selected list of books which tell the story of the bitter struggles, and the triumphs of those rugged pioneers who played leading roles in the history of this desert land.

**H4 DUST ON THE KING'S HIGHWAY**, Helen C. White. Entertaining, valuable introduction to a great-hearted Southwestern adventurer—Fr. Francisco Garces, a fictional biography. Life with Indians along the Colorado, experiences with De Anza expeditions in California, travel among the Mojaves, the Yavapais. 468 pp.....\$3.50

**H6 GOLD, GUNS AND GHOST TOWNS**, W. A. Chalfant. Combines *Outposts of Civilization* and *Tales of the Pioneers* in attractive 7x10 edition. "All the rough and ready, gold-crazy exuberance of the old West is captured in these stories. The days when men, good and bad, were motivated only by the lust for nuggets and gold dust have been sympathetically yet humorously chronicled." \$3.50

**H9 JACOB HAMBLIN, Buckskin Apostle**, Paul Bailey. Mormon trailblazer and missionary who lived adventure and made history in Navajoland, the Grand Canyon and along the Old Spanish trail. An important Southwest book, in a limited edition. Illus., endmaps, 400 pp.....\$4.50

**H10 JIM BRIDGER, Mountain Man**, Stanley Vestal. Colorful, vital biography of one of the great figures of the last century. Fur trapper, explorer, Indian fighter, emigrant guide, teller of tales about the "petrified trees." Portrait, biblio., notes, index, maps, 333 pp.....\$4.00

**H12 KIT CARSON**, Stanley Vestal. Exciting biography of a Mountain Man, Plainsman, Pathfinder, Soldier, Rancher, Indian Agent.....\$3.00

**H16 OLD BILL WILLIAMS, Mountain Man**, Alpheus H. Favour. Tempestuous career of a peerless hunter, trapper, marksman, horseman, who became more Indian than white, accompanied first survey party to make Indian treaties for Santa Fe right-of-ways. Map, photos, index...\$3.00

**H18 A PATHFINDER IN THE SOUTHWEST**, Ed Foreman. Lt. A. W. Whipple's explorations for railway route from Fort Smith to Los Angeles 1853-54. "One of the most interesting, authoritative, and human journals on the Southwest." Whipple party included mineralogists, astronomers, surveyors, naturalists, artists.....\$3.00

**H24 VIA WESTERN EXPRESS AND STAGE-COACH**, Oscar O. Winther. The human, picturesque, exciting aspects of overland transportation, before the day of the railroad. Wells Fargo, Butterfield Overland mail, Hank Monk and "Charlie" Parkhurst, Black Bart and Rattlesnake Dick. Illus., endmaps, biblio., index, 7x10.....\$3.50

**H-25 WAKE OF THE PRAIRIE SCHOONER**, Irene D. Paden. "First book ever published which attempts a comprehensive description of the old emigrant trails." Lively travelog, source of valuable new material. Maps, drawing, biblio., index, 514 pp.....\$4.50

**H28 WYATT EARP, Frontier Marshal**, Stuart N. Lake. Thrilling account of frontier days and of a man who outshot and out-thought the badmen of the toughest mining camps and cowtowns of the old Southwest. Based on Earp's own story...\$3.50

**H30 APACHE DAYS AND AFTER**, Thomas Cruse. A fascinating page of western military history long buried in the sheaves of army records. Wilderness strategy, skirmishes, pursuits and the famous Geronimo campaign presented in detail. Photos, biblio, index, 338 pp.....\$3.50

**H33 BUCKEY O'NEIL**, Ralph Keithley. An authenticated, biographical story of the life of Arizona's most famous sheriff, long extolled in campfire legend. An exciting, vigorous, robust book. Photos, 240 pp.....\$3.50

**H39 TOMBSTONE'S EPITAPH**, Douglas D. Martin. News stories, unretouched from the long lost, recently discovered files thought to have been destroyed in one of Tombstone's famous fires. Here is the news as you would have read it had you lived in Tombstone in the '80s.....\$4.50

**H41 LIEUTENANT EMORY REPORTS**, Ross Calvin. Reprinted for the first time since 1848, is the much-quoted, seldom seen *Notes of a Military Reconnaissance* by W. H. Emory. This is the salty story of a young career-soldier. Maps, notes, biblio, 208 pp.....\$4.50

**H42 ARIZONA'S DARK AND BLOODY GROUND**, Earle R. Forrest. The first authentic history of the Graham-Tewsbury vendetta in the Tonto Basin country of Central Arizona in the latter 1880s. A master-piece no lover of the West should let pass by. Photos, 320 pp.....\$4.00

**H43 MOUNTAIN MEADOWS MASSACRE**, Juanita Brooks. This book describes one of the darkest and most secret chapters in the history of the West, the tragedy of a party of emigrants massacred by Mormons and Indians. 243 pp. Index, appendix.....\$5.00

**H45 FRONTIER FIGHTER**, Nan Hillary Harrison. The Autobiography of George W. Coe, who rode and fought with Billy the Kid, the Southwest's most fabulous outlaw, as remembered by his friend and fellow-warrior. 220 pp.....\$3.50

**H46 PAGEANT IN THE WILDERNESS**, Herbert E. Bolton. The story of Father Escalante's trek into the Great Basin, 1776. A translation of the Escalante journal, which not only places the expedition in its proper historical setting, but depicts this trek as a great adventure. Biblio, Index, Photos, two maps, 250 pp.....\$5.00

Books mailed postpaid

California buyers add 3% tax

*Desert Crafts Shop*

Palm Desert, California